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Analytical Report

Fluorochemical Characterization of Aqueous Samples

PFOA ANALYSIS OF WATER SAMPLES

MPI Research Laboratory Report L0027779

Testing Laboratory

MPI Research, Inc.
3058 Research Drive
State College, PA 16801

Requester

Tim Kosto
136 Coonbrook Road
Petersburgh, NY 12138

11/2012

1 *Introduction*

Results are reported for the analysis of water samples received by MPI Research, Inc. from Taconic. This report presents results assigned to MPI Research Laboratory Report L0027779.

Specific fluorochemical characterization by liquid chromatography / tandem mass spectrometry (LC/MS/MS) was requested for these samples. Four samples were received. The samples Sample #1, Sample #2, Sample #3 and Sample #4 were analyzed.

The samples were prepared and analyzed by LC/MS/MS for the following list of fluorochemicals:

Compound Name	Acronym
Perfluorooctanoic Acid	PFOA

2 *Sample Receipt*

The samples were collected on 11/29/2012. United Parcel Service package 1Z1207901300200816 was received on 11/30/2012; package and contents uncompromised. Temperature control was wet ice and the contents were at 0.4 °C. Chain-of-Custody information is presented in Attachment C.

3 *Holding Times*

The analytical method was validated against a maximum holding time of 14 days in water samples.

The samples were received within the holding time. The samples were extracted outside of the holding time. The samples were analyzed outside of the holding time. It should be noted that this compound has shown stability in aqueous matrices for periods greater than 90 days.

4 *Methods - Analytical and Preparatory*

4.1 *LC/MS/MS*

4.1.1 Sample Preparation for LC/MS/MS Analysis

The water samples were centrifuged to remove suspended solids. Solid phase extraction (SPE) was used to prepare the samples for LC/MS/MS analysis. A 40 mL portion of sample was transferred to a C₁₈ SPE cartridge. The cartridge was eluted with 5 mL of 40% methanol: water. The eluate was discarded. The cartridge was then eluted with 5 mL of 100% methanol. A 5 mL portion of methanol was collected for analysis by LC/MS/MS. This treatment resulted in an eight-fold concentration of the sample prior to analysis.

4.1.2 Sample Analysis by LC/MS/MS

Sample extracts were analyzed using an Agilent Technologies (HP) 1100 HPLC system coupled to a Micromass Ultima MS/MS. A calibration check is performed weekly on the mass spectrometer using a NaI/Rb/Cs tuning solution to verify mass accuracy. All instrument calibration criteria were met for the analysis of the samples presented in this report. Analysis was performed using selected reaction monitoring (SRM). Raw Analytical Data can be found in Attachment D.

5. Analysis

5.1 Sample Related Comments

Two analytical runs were performed to complete the sample analysis. The following is a brief quality control narrative.

Analytical Run Number	Samples Analyzed	Comments
B0030671	Sample #1 Sample #2 Sample #3 Sample #4	Some data are unusable as a result of unacceptable quality control results. Details are provided below and in the raw data (Attachment D).
B0030726	Sample #1	All data are usable and all quality control results were acceptable.

Extracts were prepared for run B0030671 on 12/14/2012. Extracts were prepared for run B0030726 on 12/20/2012.

Analytical run B0030671 was started on 12/15/2012 and ended on 12/15/2012. Analytical run B0030726 was started on 12/21/2012 and ended on 12/21/2012.

5.2 Calibration

An eight-point calibration curve was analyzed at the beginning of the analytical sequence and throughout the run for the compounds of interest. The calibration points were prepared at 0.0050, 0.010, 0.025, 0.050, 0.10, 0.25, 0.50, and 1.0 ng/mL (ppb), as perfluorooctanoic acid (PFOA). The instrument response versus the concentration was plotted for each point. Using linear regression with 1/x weighting, the slope, y-intercept and coefficient of determination (r^2) were determined. A calibration curve is acceptable if $r^2 \geq 0.985$.

Calibration standards for MS/MS analysis were prepared using the sample preparation procedure.

The calibration curves generated in analytical runs B0030671 and B0030726 were acceptable.

5.3 Dilution

The concentration of each sample/fortification/control is determined from the standard curve, based on the peak area of each analyte. The standard responses must bracket responses of each sample set. If initial sample responses are above the standard curve, samples are diluted to give a response within the standard curve range.

The extracts for samples Sample #4, Sample #3, Sample #2, Sample #1, DUP and MS in analytical run B0030671 were diluted. The extracts for samples Sample #1, MS and DUP in analytical run B0030726 were diluted.

5.4 Retention Times

Retention times between standards and samples must not drift more than $\pm 2\%$ within an analytical run. If retention time drift exceeds this limit within an analytical run the set must be reanalyzed.

The retention times in analytical runs B0030671 and B0030726 were acceptable.

5.5 Blanks

An extraction blank was prepared and analyzed with each batch of samples. Target analytes should not be present at or above the limit of detection in the extraction blank samples.

The extraction blanks in analytical runs B0030671 and B0030726 were acceptable.

5.6 Surrogates and Internal Standards

Surrogate spikes are not a component of the LC/MS/MS analytical method.

Internal standards are not a component of the LC/MS/MS analytical method.

5.7 Matrix Spikes

Matrix spikes were prepared and analyzed. The acceptable matrix spike recovery range is 70 – 130%. Matrix spike recoveries which are outside of this range and accepted are footnoted. Matrix spike recoveries are given in Attachment B.

The sample Sample #1 was prepared and analyzed as a matrix spike in runs B0030671 and B0030726. The matrix spike results in analytical run B0030726 were acceptable. The matrix spike results in analytical run B0030671 were not acceptable.

5.8 Duplicates

Duplicates were prepared and analyzed. If the sample and laboratory duplicate are greater than 5X LOQ, and the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported. If the sample and laboratory duplicate are less than 5X LOQ, and the absolute difference is less than LOQ, the average value is reported. If the absolute difference is greater than LOQ, the higher value is reported. Results are with the sample results in Attachment A.

The sample Sample #1 was prepared and analyzed as a duplicate in runs B0030671 and B0030726. The duplicate results in analytical runs B0030671 and B0030726 were acceptable.

5.9 Laboratory Control Samples

Hypercarb filtered water was spiked with PFOA at 0.050 and 0.50 ng/mL (Spike A and Spike B respectively) with each extraction set. The acceptable laboratory control sample recovery range is between 70 and 130%.

The results of the laboratory control samples in analytical runs B0030671 and B0030726 were acceptable.

6 Data Summary

Attachment A provides detailed listing of the analytical results. All results are reported in (ng/mL) parts per billion as PFOA.

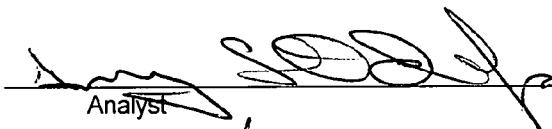
7 Data/Sample Retention

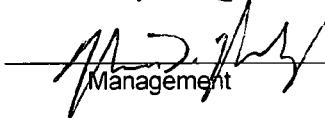
Samples are disposed of one month after the report is issued unless otherwise specified. Electronic data is archived on retrievable media and hard copy reports are stored in data folders maintained by MPI Research.

8 Attachments

- 8.1 Attachment A: Results**
- 8.2 Attachment B: Matrix Spike Recoveries**
- 8.3 Attachment C: Chain of Custody**
- 8.4 Attachment D: LC/MS/MS Raw Analytical Data**
- 8.5 Attachment E: Standards Data**

9 Signatures


Analyst


Management

01/05/12
Date

1/7/13
Date

Attachment A: Results

TAC EPA 00146

000137



Mattawan (Corporate Headquarters)
54943 North Main Street
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Analytical Report

Analytical Results PFOA ANALYSIS OF WATER SAMPLES

DuPont Sample Identification	PFOA (ng/mL)
Sample #1	7.5
Sample #1 (Laboratory Duplicate)	7.4
Sample #2	0.42
Sample #3	0.15
Sample #4	0.038

Limit of Detection (LOD) for the procedure is 0.0043 ng/mL

Limit of Quantitation (LOQ) for the procedure is 0.021 ng/mL

ND - Compound not detected

NQ - Compound detected at a level between the LOD and LOQ. Result is not quantifiable.

ND < LOD < NQ < LOQ



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ND - Compound not detected

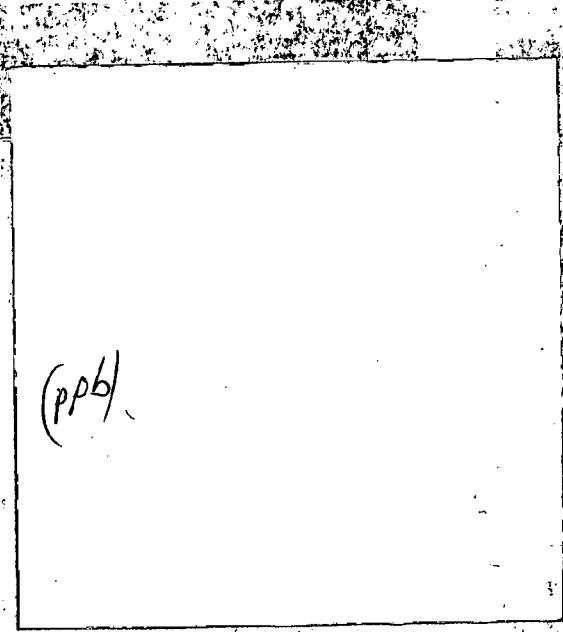
NQ - Compound detected at a level between the LOD and LOQ. Result is not quantifiable.

ND < LOD < NQ < LOQ

Results are calculated according to the following criteria

If the sample and laboratory duplicate are greater than or equal 5X LOQ, and the relative percent difference (RPD) is less than 20, the average value is reported. If the RPD is greater than 20, the higher value is reported.

If the Sample And laboratory duplicate are less than 5X LOQ, and the absolute difference Is less than LOQ, the average value is reported. If the absolute difference Is greater than LOQ, the higher value is reported.



TAC EPA 00149

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Attachment B: Matrix Spike Recoveries

LC/MS/MS Laboratory Spike Recovery

Sample ID:

Spiked Amount
(ng/mL):

	Sample Concentration (ng/mL)	Matrix Spike Result (ng/mL)	Matrix Spike Recovery (%)	Criteria (Pass / Fail)
PFOA	7.5	16	87	PASS

Lower Recovery Limit:

Upper Recovery Limit:

Concentrations represent amount present as PFOA

Attachment C: Chain of Custody

TAC EPA 00152

000143



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Login

Login Group: L0027779

Login #:	27893	Conform COC Sample:	True
Project:	P0006513	Conform COC:	True
Company Name:	Taconic	Conform Sample:	True
Submitted By:	Tim Kosto	Conform Request:	True
Login Type:	Immediate Receipt of Samples		
Started:	True		
Date Start:	12/04/2012		
Due Date:	12/14/2012		
Login Initiated:	12/04/2012		
Received By:	Ammerman, Mark		
Spread Sample:			
Label:			
MPI SD/PI:	de Lisio, Patricia		
Project Title/Type:	PFOA Analysis of Water Samples / ROUTINE		
Login Notes:			

Packages / Containers

Package	Carton	Date / Condition	Shipper / ID	Temp. Control/Temp.	Direction / Handled By
PK0031893		Received Date: 11/30/12 10:30 Package & Contents Uncompromised	UPS 1Z1207901300200816	Wet Ice 0.4	RECEIVED Ammerman, Mark
Container #	Gross Weight	pH	Container Type	Preservative	Mfg. Lot
C0700283	319.10 g		250 ml clear plastic bottle	NONE	1132011
C0700285	301.60 g		250 ml clear plastic bottle	NONE	1132011
C0700289	322.90 g		250 ml clear plastic bottle	NONE	1132011
C0700290	309.60 g		250 ml clear plastic bottle	NONE	1132011
C0700293	303.80 g		250 ml clear plastic bottle	NONE	1132011
C0700294	319.10 g		250 ml clear plastic bottle	NONE	1132011
C0700295	320.60 g		250 ml clear plastic bottle	NONE	1132011
C0700296	308.90 g		250 ml clear plastic bottle	NONE	1132011

Login

<u>Samples</u>							
<u>Sample ID</u>	<u>Container</u>	<u>Matrix</u>	<u>System</u>	<u>System Matrix</u>	<u>Sample</u>	<u>Date Sampled</u>	<u>Date Due</u>
L0027779-0001	C0700283	LIQUID	Liquid	Water	Sample #1	11/29/2012	12/14/2012
	C0700295						
L0027779-0002	C0700293	LIQUID	Liquid	Water	Sample #2	11/29/2012	12/14/2012
	C0700296						
L0027779-0003	C0700285	LIQUID	Liquid	Water	Sample #3	11/29/2012	12/14/2012
	C0700290						
L0027779-0004	C0700289	LIQUID	Liquid	Water	Sample #4	11/29/2012	12/14/2012
	C0700294						

Login Reviewed By:



Date/Time:

12/4/12 0910

Project No. _____

7

Book No. _____

E _____

Page No. _____

8TH SAMPLES

2012-7-1 SAMPLE At WELL HEAD

2

3 SAMPLE At CARGO BROS At Well

4

5 SAMPLER BEFORE THE RO SYSTEM

6

7 SAMPLE AFTER THE RO SYSTEM

8

To Page No. _____

ssed & Understood by me,

Date

Invented by:

Date

Recorded by:

TAC EPA 00155

000146

MPI

RESEARCH

MPI Research Contact: _____

Send Report To:

Company: TACONIC

Address: 136 COONBROOK RD

City, State, ZIP: PITTSBURGH, NY 12138

Attention: Tim KOSTO

Phone #: 518-658-3202 x 296

Fax #:

Email: timk@taconic.com

Study/Job #:

Signature/Date: Tim Kostos

Printed Name: Timothy Kostos

Sample Submittal

Please fax this form before sending samples.

Please send samples to shipping and receiving:
3048 Research Drive, State College, PA 16801
T: (814) 272-1039 • F: (814) 272-1019

Turnaround time (TAT) requirements:

Results Due Date: _____

Preliminary Results Format: Verbal Email Fax

Report Due Date: _____

Storage Conditions

Room temperature
Refrigerator
Freezer
Ultra Low freezer
Desiccated
Lighting required

Stability (°C/%RH): _____

Stability time period: _____

Safety Information

Special handling: _____
MSDS attached
Controlled substance: _____
HAZARDS: _____

Please fill in the diamond HMIS/NFPA
(0-4) if appropriate



Samples Are WATER

	Client ID# Description	Lot/ Control #	Amt. Sent/ Weight	# of Bottles	Matrix	Date & Time	Tests Requested
1	2012-7-1 2012-7-2 > SAMPLE #1					11/29/12 2 PM	
2	2012-7-3 2012-7-4 > SAMPLE #2					11/29/12 2 PM	
3	2012-7-5 2012-7-6 > SAMPLE #3					11/29/12 2:25PM	
4	2012-7-7 2012-7-8 > SAMPLE #4					11/29/12 2:20PM	
5							
6							
7							
8							
9							
10							

PO #: 027197

Notes:

per quote 12-116600 v1
Issued 11/13/12

Relinquished by	Date	Time	Received by	Date	Time
			<u>11/29/12</u>	<u>1030</u>	

V00028362

Administrative Form
TAC EPA 00156

000147



TEMPORARY SAMPLE STORAGE FORM

To be completed during ExyLIMS Login

Project #: P6513

Login #: L27779

Initials / Date: MH 12/4/16

One form to be completed for each package

Date / Time Received: 11/30/16 10:30

Received By: Mark Amerson

Shipper: UPS

Shipper Package ID: 121207901300200816

Temperature (deg C) / Thermometer ID: 0.1/N448

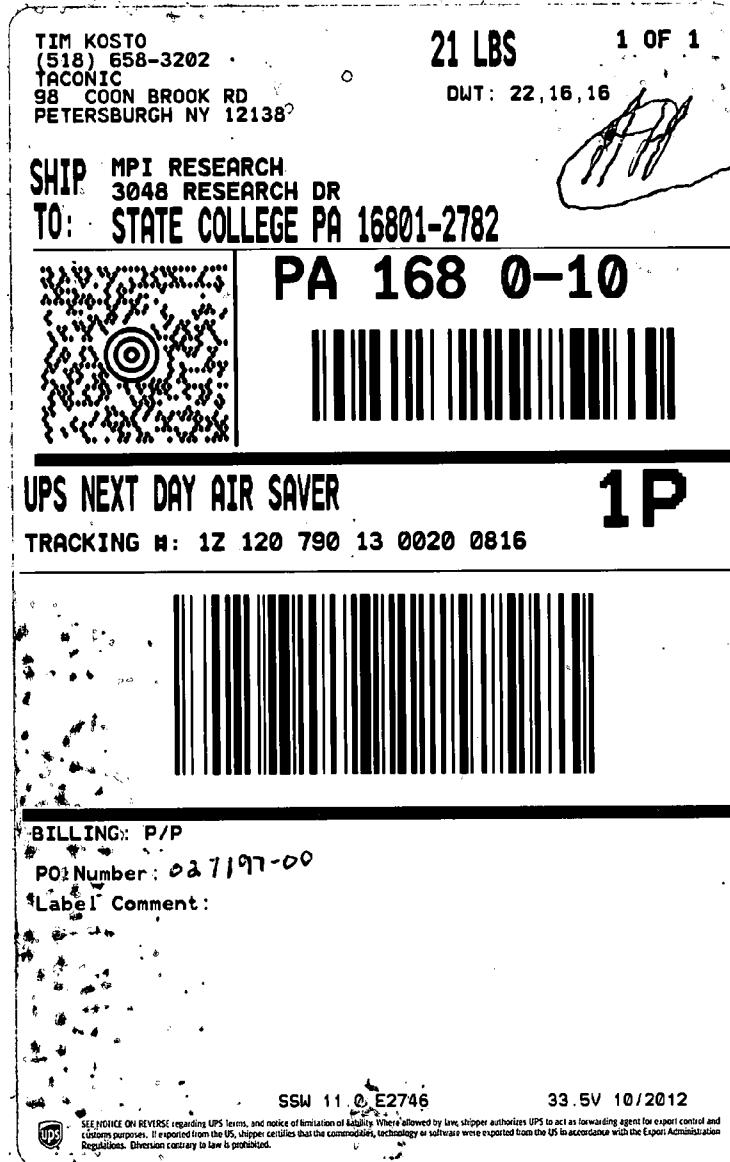
Temperature Control Method: Let it re-active

Temporary Storage Location: Walk-in cooler 3

Condition of sample(s):

- Good – Package and contents uncompromised
 - Fair – Package damaged / contents uncompromised
 - Poor – Package and contents compromised
-

Notes:



TAC EPA 00158

000149

Attachment D: Raw Data

TAC EPA 00159

000150

Step	Procedure
0	Enter who prepared this batch and the date of preparation.
	Preparation Analyst ID => Porter, Ian - 2627 Preparation Date => 14-Dec-2012 11:32 Legacy Batch ID (if applicable) =>
1	Frozen samples must be allowed to completely thaw, unsealed, at room temperature. Refrigerated samples must also be allowed to equilibrate to room temperature unsealed. Centrifuge to remove visible solids if necessary
	Analyst ID => Porter, Ian - 2627 Was centrifuging required? => Yes Centrifuge ID => N0021109 / CEN-111 / CentriPax 10 - 1200
2	Aliquot the sample to the 40 mL line of a 50 mL polypropylene centrifuge tube. Calibration standards and non sample QC are prepared as 40 mL aliquots of HPLC water filtered through a Hypercarb drop in column in a 50 mL centrifuge tube.
	Analyst ID => Porter, Ian - 2627 50 mL Polypropylene Centrifuge Tube Material ID => SL0044247 / Hypercarb Filter (Welded) Explode: ESD04/2013 - 84247 Water Solution ID =>
3	To sample aliquots suspected of being chlorinated, add 200 μ L of a 250 mg/mL sodium thiosulfate solution to the 40 mL aliquot and mix well to de-activate any chlorine, before fortification. Note samples treated in "Observation" tab.
	Analyst ID => Porter, Ian - 2627 Was Sodium Thiosulfate required? => No Sodium Thiosulfate Solution ID => Pipette ID =>
4	For samples, measure pH with test strips and adjust to ~7 (if required). Record pH and approximate volume used for the adjustment in the "Observations" tab.
	Analyst ID => Porter, Ian - 2627 544 Test Strips Material ID => M4001773 / pH Test strips 0.1-7 - 11767 Was pH Adjustment required? => No Pipette ID => If pH adjusted up, enter NaOH Reagent ID => If pH adjusted down, enter HCOOH Reagent ID =>
5	Fortify as appropriate the Standards and QC samples. Document the fortifications of the Standards and QC in ExyLIMS as spikes (3%) at the "Preparation Fortification" stage in Batch. Record the pipette(s) used for the fortifications below.
	Analyst ID => Porter, Ian - 2627 Pipette ID => N0000104 / RP-11 / Auto Pipette - 73255 Pipette ID => Pipette ID =>
6	Condition C18 SPE cartridges (1g, 8 mL) by passing ~10 mL methanol thru the column followed by ~5 mL of HPLC water (~2 drops / sec.). Do not let columns run dry.
	Analyst ID => Porter, Ian - 2627 SPE Cartridge Material ID => R0000001 / Phenomenex-Aqua Vire Bon (1g) C18 - 74007 Methanol Reagent ID => R0000001 / METHANOL_HPLC_C_E_pHec: 12/13/2014 - E3006 Water Solution ID => SL0044247 / Hypercarb (Raw Water) Explode: ESD04/2013 - 84247
7	Load standard, QC or sample on to the conditioned C18 SPE cartridge. Discard the eluate.
	Analyst ID => Porter, Ian - 2627
8	Wash with ~3 mL 40% methanol in water. Discard the eluate.
	Analyst ID => Porter, Ian - 2627 40% Methanol in Water Solution ID => SL0044189 / 40/50 Methanol : Water / E_phec: 03/01/2013 - 84183
9	Elute with ~3 mL 100% methanol. Collect 3 mL of the eluate into a graduated 15 mL polypropylene centrifuge tube. Final volume is 3 mL.
	Analyst ID => Porter, Ian - 2627 Methanol Reagent ID => R0000001 / METHANOL_HPLC_C_E_phec: 12/13/2014 - E3006 15 mL Polypropylene Centrifuge Tube Material ID => M4007340/1 (15 mL) High Capacity Polypropylene Centrifuge Tube - 73256
10	If extracts need diluted, dilute with 80/20 methanol/HPLC water.
	Analyst ID => Porter, Ian - 2627 Methanol/HPLC Water Solution ID => SL0043291 / 80/20 Methanol H2O / E_phec: 04/02/2013 - E3293
11	Place ~1.5 mL of eluate into HPLC vials for analysis.
	Analyst ID => Porter, Ian - 2627 HPLC Vials Material ID => M4007379/7 (50) CRIMP VIAL_CAP_SEPTA - 72792
12	LC-MS/MS Analysis
	Analyst ID => Porter, Ian - 2627 LC-MS/MS Instrument ID => M0000045 / LCMS-2020 / Agilent Technologies (Inf) 1100 UPLC system coupled to a Micromass UltiMate 3D/MS + 2312F Mobile Phase (A) Solution ID => R0000001 / 80/20 Methanol HPLC Water / E_phec: 04/01/2013 - E3276 Mobile Phase (B) Reagent ID => R0000001 / METHANOL_HPLC_C_E_phec: 12/13/2014 - E3006 HPLC Column Material ID => M4007340 / Gemini Lux (15 cm, 4.6 mm x 2.0 mm x 7.50)

MPI Research

Limits [B0030671]

Analyte	Units	Limit of Detection	Limit of Quantitation
PFOA (TRIAL)	ng/mL	0.0043	0.0214

MPI Research

Observations [B0030671]

Test Number	Lab Sample	Product Sample	Observations by Test
ID	ID		
658606	L0027779-0001	NONE	
658598	L0027779-0001	NONE	
658607	L0027779-0002	NONE	
658600	L0027779-0002	NONE	
658608	L0027779-0003	NONE	
658601	L0027779-0003	NONE	
658609	L0027779-0004	NONE	
658602	L0027779-0004	NONE	

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Preparation Data [B0030671]

Test	Lab	Product	2830	2831	2832	2833	2834
Number	Sample	Sample	Sample Amount	Preparation Final	Aliquot Initial	Aliquot Final	Dilution Factor
	ID	ID	mL	mL	mL	mL	-
658646	B0030671-0011	WASHNC	40	5	1	1	1
658647	B0030671-0012	RB	40	5	1	1	1
658648	B0030671-0013	RS1	40	5	1	1	1
658649	B0030671-0014	RS2	40	5	1	1	1
658650	B0030671-0015	MS: L0027779-0001 / 658598	40	5	0.01	1	100
658667	B0030671-0028	MS: L0027779-0001 / 658606	40	5	0.1	1	10
658651	B0030671-0016	WASHNC	40	5	1	1	1
658606	L0027779-0001	NONE	40	5	0.01	1	100
658655	B0030671-0020	DUP: L0027779-0001 / 658598	40	5	0.01	1	100
658598	L0027779-0001	NONE	40	5	0.1	1	10
658666	B0030671-0027	DUP: L0027779-0001 / 658606	40	5	0.1	1	10
658607	L0027779-0002	NONE	40	5	0.01	1	100
658600	L0027779-0002	NONE	40	5	0.1	1	10
658608	L0027779-0003	NONE	40	5	0.01	1	100
658601	L0027779-0003	NONE	40	5	0.1	1	10
658609	L0027779-0004	NONE	40	5	0.01	1	100
658602	L0027779-0004	NONE	40	5	0.1	1	10
658656	B0030671-0021	WASHNC	40	5	1	1	1

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Instrument Data [B0030671]

Test Number	Analyte Number	Lab ID	Client/Other ID	Aquisition Date	Analyte	Analyte Peak Area	Retention Time	Type	Result	IS	IS Peak Area
658636	2913	B0030671-0001	S0	15-Dec-2012 11:43:36	PFOA (TRIAL)	299	6.314	Blank	0.0022		
658637	2913	B0030671-0002	S1	15-Dec-2012 11:59:31	PFOA (TRIAL)	692	6.311	Standard	0.0059		
658638	2913	B0030671-0003	S2	15-Dec-2012 12:15:44	PFOA (TRIAL)	1111	6.326	Standard	0.0098		
658639	2913	B0030671-0004	S3	15-Dec-2012 12:31:56	PFOA (TRIAL)	2608	6.345	Standard	0.0239		
658640	2913	B0030671-0005	S4	15-Dec-2012 12:48:08	PFOA (TRIAL)	4919	6.338	Standard	0.0455		
658641	2913	B0030671-0006	S5	15-Dec-2012 13:04:23	PFOA (TRIAL)	10961	6.326	Standard	0.1021		
658642	2913	B0030671-0007	S6	15-Dec-2012 13:20:34	PFOA (TRIAL)	25703	6.345	Standard	0.2402		
658643	2913	B0030671-0008	S7	15-Dec-2012 13:36:40	PFOA (TRIAL)	57141	6.337	Standard	0.5346		
658644	2913	B0030671-0009	S8	15-Dec-2012 13:52:48	PFOA (TRIAL)	111252	6.341	Standard	1.0414		
658645	2913	B0030671-0010	ICV	15-Dec-2012 14:09:02	PFOA (TRIAL)	26772	6.353	QC	0.2502		
658646	2913	B0030671-0011	WASH	15-Dec-2012 14:25:14	PFOA (TRIAL)			Blank			
658647	2913	B0030671-0012	MB	15-Dec-2012 14:41:27	PFOA (TRIAL)	140	6.376	Blank	0.0008		
658648	2913	B0030671-0013	LCS	15-Dec-2012 14:57:40	PFOA (TRIAL)	5163	6.357	QC	0.0478		
658649	2913	B0030671-0014	LCS	15-Dec-2012 15:13:51	PFOA (TRIAL)	51099	6.334	QC	0.4780		
658650	2913	B0030671-0015	MS: Sample #1	15-Dec-2012 15:30:03	PFOA (TRIAL)	9332	6.368	QC	8.6846		
658667	2913	B0030671-0028	MS: Sample #1	15-Dec-2012 15:46:14	PFOA (TRIAL)	96095	6.345	QC	8.9941		
658651	2913	B0030671-0016	WASH	15-Dec-2012 16:02:20	PFOA (TRIAL)	86	6.361	Blank	0.0003		
658652	2913	B0030671-0017	S1	15-Dec-2012 16:18:35	PFOA (TRIAL)	706	6.345	Standard	0.0061		
658653	2913	B0030671-0018	S2	15-Dec-2012 16:34:46	PFOA (TRIAL)	1049	6.345	Standard	0.0093		
658654	2913	B0030671-0019	S3	15-Dec-2012 16:50:57	PFOA (TRIAL)	2785	6.341	Standard	0.0255		
658606	2913	L0027779-0001	SAM: Sample #1	15-Dec-2012 17:07:02	PFOA (TRIAL)	8474	6.380	Analyte	7.8812		
658655	2913	B0030671-0020	DUP: Sample #1	15-Dec-2012 17:23:14	PFOA (TRIAL)	9050	6.364	Analyte	8.4200		
658598	2913	L0027779-0001	SAM: Sample #1	15-Dec-2012 17:39:25	PFOA (TRIAL)	85530	6.353	Analyte	8.0046		
658666	2913	B0030671-0027	DUP: Sample #1	15-Dec-2012 17:55:38	PFOA (TRIAL)	88339	6.353	Analyte	8.2678		
658607	2913	L0027779-0002	SAM: Sample #2	15-Dec-2012 18:11:51	PFOA (TRIAL)	768	6.326	Analyte	0.6641		
658600	2913	L0027779-0002	SAM: Sample #2	15-Dec-2012 18:28:04	PFOA (TRIAL)	4495	6.349	Analyte	0.4155		
658608	2913	L0027779-0003	SAM: Sample #3	15-Dec-2012 18:44:18	PFOA (TRIAL)	497	6.361	Analyte	0.4101		
658601	2913	L0027779-0003	SAM: Sample #3	15-Dec-2012 19:00:29	PFOA (TRIAL)	1657	6.349	Analyte	0.1497		
658609	2913	L0027779-0004	SAM: Sample #4	15-Dec-2012 19:16:41	PFOA (TRIAL)	435	6.364	Analyte	0.3525		
658602	2913	L0027779-0004	SAM: Sample #4	15-Dec-2012 19:32:53	PFOA (TRIAL)	462	6.357	Analyte	0.0377		
658656	2913	B0030671-0021	WASH	15-Dec-2012 19:48:59	PFOA (TRIAL)			Blank			
658657	2913	B0030671-0022	S4	15-Dec-2012 20:05:13	PFOA (TRIAL)	4904	6.380	Standard	0.0454		
658658	2913	B0030671-0023	S5	15-Dec-2012 20:21:29	PFOA (TRIAL)	10012	6.353	Standard	0.0932		
658659	2913	B0030671-0024	S6	15-Dec-2012 20:37:36	PFOA (TRIAL)	24319	6.376	Standard	0.2272		
658660	2913	B0030671-0025	S7	15-Dec-2012 20:53:49	PFOA (TRIAL)	52857	6.353	Standard	0.4945		
658661	2913	B0030671-0026	S8	15-Dec-2012 21:10:03	PFOA (TRIAL)	104218	6.364	Standard	0.9755		

MPI Research**Result [B0030671]**

Test	Lab	Product	Date	2913
Number	Sample	Sample	Of	PFOA (TRIAL)
	ID	ID	Analysis	ng/mL
658645	B0030671-0010	ICV	15-Dec-2012 14:09:02	0.2502
658647	B0030671-0012	RB	15-Dec-2012 14:41:27	0.0008
658648	B0030671-0013	RS1	15-Dec-2012 14:57:40	0.0478
658649	B0030671-0014	RS2	15-Dec-2012 15:13:51	0.4780
658650	B0030671-0015	MS: L0027779-0001 / 658598	15-Dec-2012 15:30:03	8.6846
658667	B0030671-0028	MS: L0027779-0001 / 658606	15-Dec-2012 15:46:14	8.9941
658606	L0027779-0001	NONE	15-Dec-2012 17:07:02	7.8812
658655	B0030671-0020	DUP: L0027779-0001 / 658598	15-Dec-2012 17:23:14	8.4200
658598	L0027779-0001	NONE	15-Dec-2012 17:39:25	8.0046
658666	B0030671-0027	DUP: L0027779-0001 / 658606	15-Dec-2012 17:55:38	8.2678
658607	L0027779-0002	NONE	15-Dec-2012 18:11:51	0.6641
658600	L0027779-0002	NONE	15-Dec-2012 18:28:04	0.4155
658608	L0027779-0003	NONE	15-Dec-2012 18:44:18	0.4101
658601	L0027779-0003	NONE	15-Dec-2012 19:00:29	0.1497
658609	L0027779-0004	NONE	15-Dec-2012 19:16:41	0.3525
658602	L0027779-0004	NONE	15-Dec-2012 19:32:53	0.0377

MPI Research**Result Formatted [B0030671]**

Test	Lab	Product	2913
Number	Sample	Sample	PFOA (TRIAL)
	ID	ID	ng/mL
658645	B0030671-0010	ICV	0.25
658647	B0030671-0012	RB	ND
658648	B0030671-0013	RS1	0.048
658649	B0030671-0014	RS2	0.48
658650	B0030671-0015	MS: L0027779-0001 / 658598	8.7
658667	B0030671-0028	MS: L0027779-0001 / 658606	9.0
658606	L0027779-0001	NONE	7.9
658655	B0030671-0020	DUP: L0027779-0001 / 658598	8.4
658598	L0027779-0001	NONE	8.0
658666	B0030671-0027	DUP: L0027779-0001 / 658606	8.3
658607	L0027779-0002	NONE	0.66
658600	L0027779-0002	NONE	0.42
658608	L0027779-0003	NONE	0.41
658601	L0027779-0003	NONE	0.15
658609	L0027779-0004	NONE	0.35
658602	L0027779-0004	NONE	0.038

MPI Research

QC [B0030671]

				2913
Reference	Identity	Label	Units	PFOA (TRIAL)
658645	B0030671-0010	ICV: 0	ng/mL	0.2502
-	-	RS		
207920	SS0045592	RS		0.25000
ICV		RS	% Accuracy	100
658647	B0030671-0012	RB: 0	ng/mL	ND
-	-	RB		
-	-	RB		
RB		RB	Absolute	ND
658648	B0030671-0013	RS1: 0	ng/mL	0.0478
-	-	RS		
207975	SK0151239	RS		0.050001
RS1		RS	% Accuracy	96
658649	B0030671-0014	RS2: 0	ng/mL	0.4780
-	-	RS		
207976	SK0151240	RS		0.50001
RS2		RS	% Accuracy	96
658650	B0030671-0015	MS: 658598	ng/mL	8.6846
658598	L0027779-0001	CS	ng/mL	8.0046
207977	SK0151241	CS		0.50001
MS		CS	% Recovery	136
658667	B0030671-0028	MS: 658598	ng/mL	8.9941
658598	L0027779-0001	CS	ng/mL	8.0046
207978	SK0151242	CS		0.50001
MS		CS	% Recovery	198
658655	B0030671-0020	DUP: 658598	ng/mL	8.4200
658598	L0027779-0001	CD	ng/mL	8.0046
-	-	CD		
DUP		CD	% Difference	5.1

MPI Research

QC [B0030671]

				2913
Reference	Identity	Label	Units	PFOA (TRIAL)
658666	B0030671-0027	DUP: 658598	ng/mL	8.2678
658598	L0027779-0001	CD	ng/mL	8.0046
-	-	CD		
DUP		CD	% Difference	3.2

MPI Research**Calculated Result [B0030671]**

Test	Lab	Product	2915
Number	Sample	Sample	PFOA
	ID	ID	ng/mL
658645	B0030671-0010	ICV	0.25
658647	B0030671-0012	RB	ND
658648	B0030671-0013	RS1	0.048
658649	B0030671-0014	RS2	0.48
658650	B0030671-0015	MS: L0027779-0001 / 658598	8.7
658667	B0030671-0028	MS: L0027779-0001 / 658606	9.0
658606	L0027779-0001	NONE	7.9
658655	B0030671-0020	DUP: L0027779-0001 / 658598	8.4
658598	L0027779-0001	NONE	8.0
658666	B0030671-0027	DUP: L0027779-0001 / 658606	8.3
658607	L0027779-0002	NONE	0.66
658600	L0027779-0002	NONE	0.42
658608	L0027779-0003	NONE	0.41
658601	L0027779-0003	NONE	0.15
658609	L0027779-0004	NONE	0.35
658602	L0027779-0004	NONE	0.038

MPI Research

Acceptance Criteria [B0030671]

Acceptance Criteria					
#	Requirement	Units	Criteria	Value	Pass/Fail
1	Chromatogram must show a peak of a product ion at 369 amu from a parent of 413.	-	-	-	Pass
2	Method blanks must not contain PFOA > LOD	-	-	-	Pass
3	Recoveries of control spikes and matrix spikes must be between 70 - 130 % of known values. If any control spike fails, the entire set must be re-extracted. Any matrix spike outside the acceptance limit should be evaluated by the analyst to determine if re-extraction is necessary	-	-	-	Fail
4	The correlation coefficient (R) for calibration curves generated must be $R \geq 0.985$. If calibration results fall outside these limits, then the entire set should be reanalyzed.	R2	≥ 0.985	0.998	Pass
5	The response from the check standard should be within +/- 15% of the average response from the 250 ng/L calibration standard concentrations.	%	+/- 15	7	Pass
6	Retention times between standards and samples must not drift more than +/- 2% within an analytical run. If retention time drift exceeds this limit within an analytical run, the set must be reanalyzed	-	-	-	Pass
Batch Acceptance Criteria Comment (reported in lieu of default)					

Vial	File Name	MS Method	HPLC Method	MS Tune File	Inj. Volume	
1	B0030671-001	008 PFOA	water_3	PFOA Tune	15	
2	B0030671-002	008 PFOA	water_3	PFOA Tune	15	
3	B0030671-003	008 PFOA	water_3	PFOA Tune	15	
4	B0030671-004	008 PFOA	water_3	PFOA Tune	15	
5	B0030671-005	008 PFOA	water_3	PFOA Tune	15	
6	B0030671-006	008 PFOA	water_3	PFOA Tune	15	
7	B0030671-007	008 PFOA	water_3	PFOA Tune	15	
8	B0030671-008	008 PFOA	water_3	PFOA Tune	15	
9	B0030671-009	008 PFOA	water_3	PFOA Tune	15	
10	B0030671-010	008 PFOA	water_3	PFOA Tune	15	
11	94	B0030671-011	008 PFOA	water_3	PFOA Tune	15
12	11	B0030671-012	008 PFOA	water_3	PFOA Tune	15
13	12	B0030671-013	008 PFOA	water_3	PFOA Tune	15
14	13	B0030671-014	008 PFOA	water_3	PFOA Tune	15
15	14	B0030671-015	008 PFOA	water_3	PFOA Tune	15
16	15	B0030671-016	008 PFOA	water_3	PFOA Tune	15
17	94	B0030671-017	008 PFOA	water_3	PFOA Tune	15
18	2	B0030671-018	008 PFOA	water_3	PFOA Tune	15
19	3	B0030671-019	008 PFOA	water_3	PFOA Tune	15
20	4	B0030671-020	008 PFOA	water_3	PFOA Tune	15
21	16	B0030671-021	008 PFOA	water_3	PFOA Tune	15
22	17	B0030671-022	008 PFOA	water_3	PFOA Tune	15
23	18	B0030671-023	008 PFOA	water_3	PFOA Tune	15
24	19	B0030671-024	008 PFOA	water_3	PFOA Tune	15
25	20	B0030671-025	008 PFOA	water_3	PFOA Tune	15
26	31	B0030671-026	008 PFOA	water_3	PFOA Tune	15
27	32	B0030671-027	008 PFOA	water_3	PFOA Tune	15
28	33	B0030671-028	008 PFOA	water_3	PFOA Tune	15
29	34	B0030671-029	008 PFOA	water_3	PFOA Tune	15
30	35	B0030671-030	008 PFOA	water_3	PFOA Tune	15
31	94	B0030671-031	008 PFOA	water_3	PFOA Tune	15
32	5	B0030671-032	008 PFOA	water_3	PFOA Tune	15
33	6	B0030671-033	008 PFOA	water_3	PFOA Tune	15
34	7	B0030671-034	008 PFOA	water_3	PFOA Tune	15
35	8	B0030671-035	008 PFOA	water_3	PFOA Tune	15
36	9	B0030671-036	008 PFOA	water_3	PFOA Tune	15

Ikp
12/14/12

Verified By: lkd 12/14/12

STUDY NO: 627779

	Sample Description	Sample Type	DF	PFOA (ng/mL)	
1	[658636] B0030671-0001 S0 SPK:0.000ng/mL	Blank	1	0.000	<i>Fkp</i>
2	[658637] B0030671-0002 S1 SPK:0.00500ng/mL	Standard	1	0.00500	<i>12/14/12</i>
3	[658638] B0030671-0003 S2 SPK:0.0100ng/mL	Standard	1	0.0100	
4	[658639] B0030671-0004 S3 SPK:0.0250ng/mL	Standard	1	0.0250	
5	[658640] B0030671-0005 S4 SPK:0.0500ng/mL	Standard	1	0.0500	
6	[658641] B0030671-0006 S5 SPK:0.100ng/mL	Standard	1	0.100	
7	[658642] B0030671-0007 S6 SPK:0.250ng/mL	Standard	1	0.250	
8	[658643] B0030671-0008 S7 SPK:0.500ng/mL	Standard	1	0.500	
9	[658644] B0030671-0009 S8 SPK:1.00ng/mL	Standard	1	1.00	
10	[658645] B0030671-0010 ICV SPK:0.250ng/mL	QC	1	0.250	
11	[658646] B0030671-0011 WASH	Blank	1	0	
12	[658647] B0030671-0012 MB	Blank	1	0	
13	[658648] B0030671-0013 LCS SPK:0.0500ng/mL	QC	1	0.0500	
14	[658649] B0030671-0014 LCS SPK:0.500ng/mL	QC	1	0.500	
15	[658650] B0030671-0015 MS:L0027779-0001 SPK:0.500ng/mL	QC	100	0.500	
16	[658667] B0030671-0028 MS:L0027779-0001 SPK:0.500ng/mL	QC	10	0.500	
17	[658651] B0030671-0016 WASH	Blank	1	0	
18	[658652] B0030671-0017 S1 SPK:0.00500ng/mL	Standard	1	0.00500	
19	[658653] B0030671-0018 S2 SPK:0.0100ng/mL	Standard	1	0.0100	
20	[658654] B0030671-0019 S3 SPK:0.0250ng/mL	Standard	1	0.0250	
21	[658606] L0027779-0001 SAM:Sample #1	Analyte	100	0	
22	[658655] B0030671-0020 DUP:L0027779-0001	Analyte	100	0	
23	[658598] L0027779-0001 SAM:Sample #1	Analyte	10	0	
24	[658666] B0030671-0027 DUP:L0027779-0001	Analyte	10	0	
25	[658607] L0027779-0002 SAM:Sample #2	Analyte	100	0	
26	[658600] L0027779-0002 SAM:Sample #2	Analyte	10	0	
27	[658608] L0027779-0003 SAM:Sample #3	Analyte	100	0	
28	[658601] L0027779-0003 SAM:Sample #3	Analyte	10	0	
29	[658609] L0027779-0004 SAM:Sample #4	Analyte	100	0	
30	[658602] L0027779-0004 SAM:Sample #4	Analyte	10	0	
31	[658656] B0030671-0021 WASH	Blank	1	0	
32	[658657] B0030671-0022 S4 SPK:0.0500ng/mL	Standard	1	0.0500	
33	[658658] B0030671-0023 S5 SPK:0.100ng/mL	Standard	1	0.100	
34	[658659] B0030671-0024 S6 SPK:0.250ng/mL	Standard	1	0.250	
35	[658660] B0030671-0025 S7 SPK:0.500ng/mL	Standard	1	0.500	
36	[658661] B0030671-0026 S8 SPK:1.00ng/mL	Standard	1	1.00	

Method File: C:\MASSLYNX\008 APFO 2.PRO\ACQUDB\water_3

Last Modified: Friday, December 14, 2012 14:47:43

Printed: Friday, December 14, 2012 14:47:48

HP1100 LC Pump Initial Conditions**Solvents**

A%	70.0
B%	30.0
C%	0.0
D%	0.0

Jkp
 12/14/12

Flow (ml/min)	0.400
Stop Time (mins)	15.0
Min Pressure (bar)	0
Max Pressure (bar)	400
Oven Temperature Left(°C)	35.0
Oven Temperature Right(°C)	35.0

HP1100 LC Pump Gradient Timetable

The gradient Timetable contains 8 entries which are :

Time	A%	B%	C%	D%	Flow	Pressure
0.00	70.0	30.0	0.0	0.0	0.400	400
0.40	70.0	30.0	0.0	0.0	0.400	400
2.00	10.0	90.0	0.0	0.0	0.400	400
7.00	10.0	90.0	0.0	0.0	0.400	400
7.50	0.0	100.0	0.0	0.0	0.400	400
9.00	0.0	100.0	0.0	0.0	0.400	400
9.50	70.0	30.0	0.0	0.0	0.400	400
15.00	70.0	30.0	0.0	0.0	0.400	400

HP1100 LC Pump External Event Timetable

The Timetable contains 4 entries which are :

Time	Column Switch	Contact1	Contact2	Contact3	Contact4
Initial	Off	Off	Off	Off	Off
0.00	Off	On	Off	Off	Off
0.10	Off	Off	On	Off	Off
8.00	Off	Off	Off	On	Off

HP1100 Autosampler Initial Conditions

Draw Speed	200.0
Eject Speed (μl/min)	200
Draw Position (mm)	0.10
Stop Time (mins)	15.00
Injection Volume(μl)	15.0
Vial Number	3

Scanning Method Report

Page 1

Method: C:\MASSLYNX\008 APFO 2.PRO\ACQUDB\008 PFOA

Last Modified: Tue Oct 18 15:04:59 2011

Printed: Fri Dec 14 14:47:57 2012

Solvent Delay (mins) : 0.00

Function : 1 MRM of 1 Mass Pair (ESP-)

Inter Channel Delay (Secs) : 0.03

Span (Daltons) : 0.00

Start Time (Mins) : 0.00

End Time (Mins) : 8.00

Repeats : 1

Channel Parent Daughter Dwell (Secs) Coll Energy (eV) Cone (V)

1	413.00	369.00	0.20	10	.
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11/11/14
EKF

TAC EPA 00174

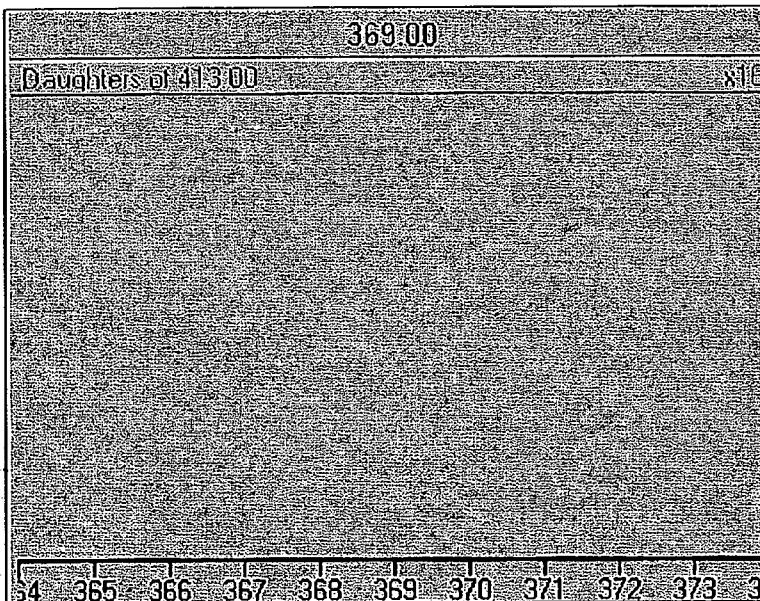
000165

Tuning Method Report

Page 1

Method: C:\MASSLYNX\008 APFO 2.PRO\ACQUDB\PFOA TUNE

Printed: Fri Dec 14 14:48:18 2012



SOURCE (ESP-)	Set	Rdbk	Analyser	Set	Rdbk
Capillary	3.06	-3.00	LM Res 1	10.0	
Cone	10	-10	HM Res 1	10.0	
Hexapole 1	0.4		IEnergy 1	2.0	
Aperture 1	0.2		Entrance	8	18
Hexapole 2	0.4		Collision	10	9
Source Block Temp.	100	100	Exit	8	18
Desolvation Temp.	300	300	LM Res 2	9.3	
			HM Res 2	9.4	
			IEnergy 2	2.0	
			Multiplier	700	-694
Pressures		Rdbk	Gas Flows		Rdbk
Analyser Vacuum		OFF	Cone Gas	160.0	
Gas Cell		9.6e-4	Desolvation	644.3	

LOD and LOQ Determination

MPI Study No.: L27668
Set No: B30415
Extraction Date: 11/27/12
Analyzed on: 12/02/12

The height of the first 0.005 ng/mL standard of the analytical run is measured in centimeters and recorded. The height of the noise in a one minute range before the PFOA retention time in the reagent control is measured in centimeters and recorded. The noise height is then divided by the standard height. The result is converted to ng/mL by multiplying by the concentration of the standard measured (0.005 ng/mL). The LOD is calculated by taking 3 times the signal to noise ratio in ng/mL. The LOQ is calculated by taking 5 times the LOD.

MPI ID	Concentration (ng/mL)	Height (cm)
B0030415-0002	0.005	6.3
Reagent Control	0	1.8

Signal to Noise Ratio = [height of the noise in the reagent control (cm) / height of the 0.005 ng/mL standard(cm)] x 0.005 ng/mL

Signal to Noise Ratio (ng/mL) = 0.00143 ng/mL
LOD = 0.0043 ng/mL
LOQ = 0.0214 ng/mL

Verified By: ASD 12/3/12

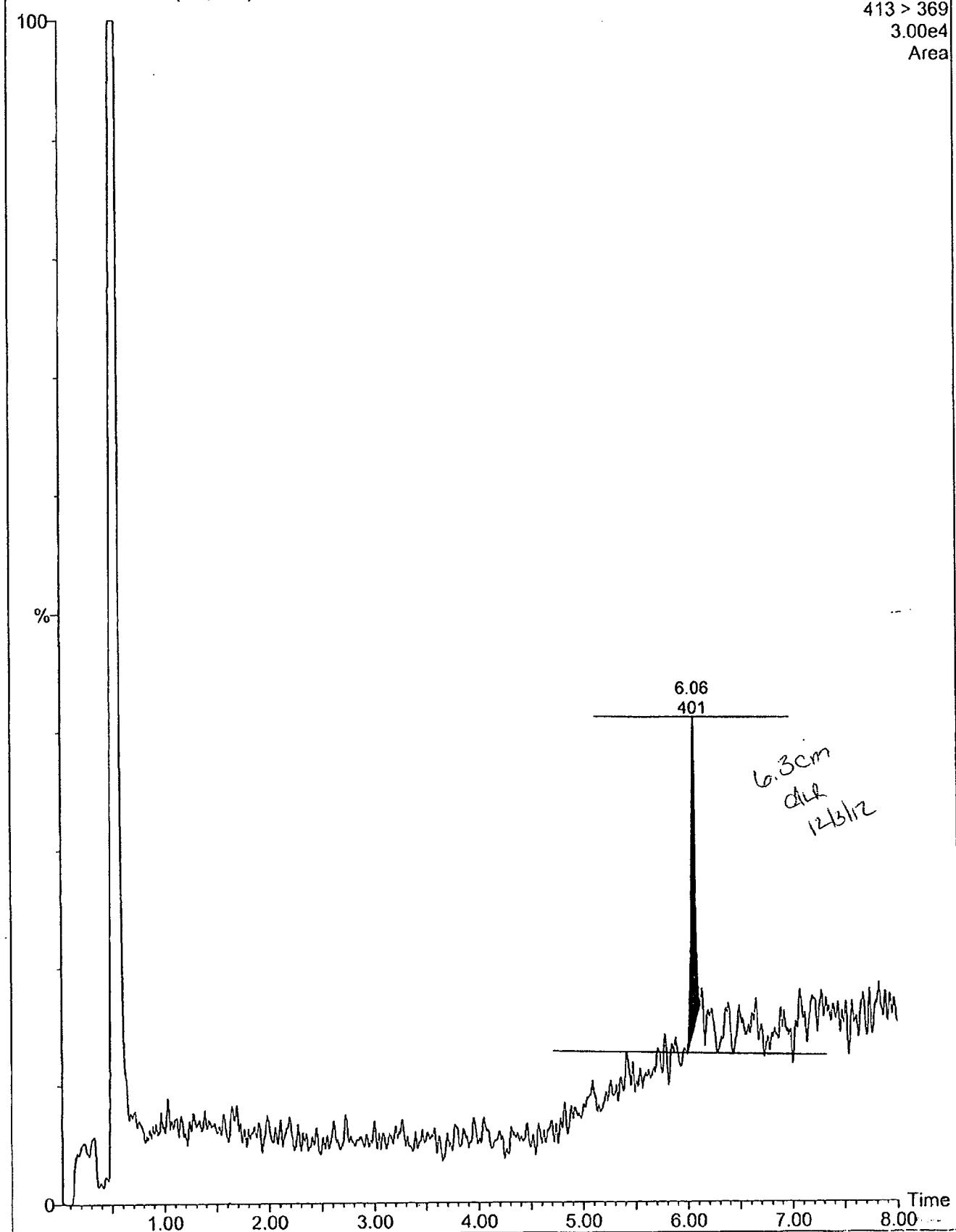
[654591] B0030415-0002 S1 SPK:0.00500ng/mL

02-Dec-2012 06:43:59

LCMSMS #7

B0030415-002 Sm (Mn, 2x2)

MRM of 1 Channel ES-
413 > 369
3.00e4
Area



TAC EPA 00177

000168

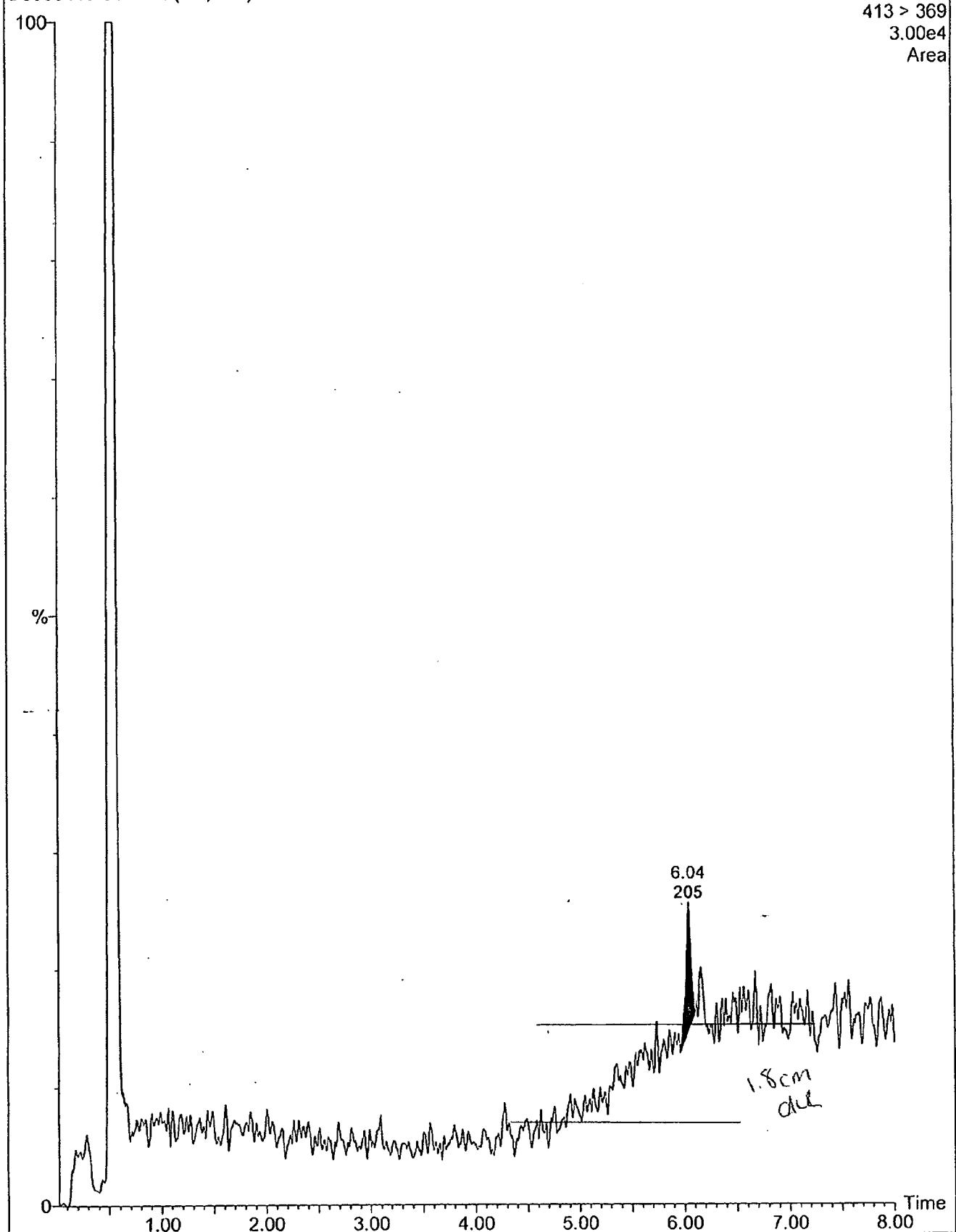
[654601] B0030415-0012 MB

02-Dec-2012 09:25:54

LCMSMS #7

B0030415-012 Sm (Mn, 2x2)

MRM of 1 Channel ES-
413 > 369
3.00e4
Area



TAC EPA 00178

000169



NOTE TO FILE

Date: 12/18/12

MPI Research State College Project #: P6513

MPI Study Number: N/A

Client Study #: N/A

NOTE:

Batch B0030671 (L27779) the matrix spike was outside the specification. The sample will be re-extracted and re-analyzed.

Signature: 

Date: 12/18/12

Quantify Compound Summary Report

Page 1

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

Job Code:

Printed: Tue Dec 18 06:13:01 2012

Compound 1: PFOA

.. File Name	Sample Description	Type	Std Conc.	RT	Area	ng/mL
bb B0030671-001	658636 B0030671-0001 S0 SPK:0.000..	Blank	-	6.314	299	0.0022
bb B0030671-002	658637 B0030671-0002 S1 SPK:0.005..	Standard	0.0050	6.311	692	0.0059
bb B0030671-003	658638 B0030671-0003 S2 SPK:0.010..	Standard	0.0100	6.326	1111	0.0098
bb B0030671-004	658639 B0030671-0004 S3 SPK:0.025..	Standard	0.0250	6.345	2608	0.0239
bb B0030671-005	658640 B0030671-0005 S4 SPK:0.050..	Standard	0.0500	6.338	4919	0.0455
bb B0030671-006	658641 B0030671-0006 S5 SPK:0.100..	Standard	0.1000	6.326	10961	0.1021
bb B0030671-007	658642 B0030671-0007 S6 SPK:0.250..	Standard	0.2500	6.345	25703	0.2402
bb B0030671-008	658643 B0030671-0008 S7 SPK:0.500..	Standard	0.5000	6.337	57141	0.5346
bb B0030671-009	658644 B0030671-0009 S8 SPK:1.00n..	Standard	1.0000	6.341	111252	1.0414
bb B0030671-010	658645 B0030671-0010 ICV SPK:0.25..	QC	0.2500	6.353	26772	0.2502
- B0030671-011	658646 B0030671-0011 WASH	Blank	-	Not Found	0	0.0000
bb B0030671-012	658647 B0030671-0012 MB	Blank	-	6.376	140	0.0008
bb B0030671-013	658648 B0030671-0013 LCS SPK:0.05..	QC	0.0500	6.357	5163	0.0478
bb B0030671-014	658649 B0030671-0014 LCS SPK:0.50..	QC	0.5000	6.334	51099	0.4780
bb B0030671-015	658650 B0030671-0015 MS:L0027779-..	QC	0.5000	6.368	9332	8.6846
bb B0030671-016	658667 B0030671-0028 MS:L0027779-..	QC	0.5000	6.345	96095	8.9941
bb B0030671-017	658651 B0030671-0016 WASH	Blank	-	6.361	86	0.0003
bb B0030671-018	658652 B0030671-0017 S1 SPK:0.005..	Standard	0.0050	6.345	706	0.0061
bb B0030671-019	658653 B0030671-0018 S2 SPK:0.010..	Standard	0.0100	6.345	1049	0.0093
bb B0030671-020	658654 B0030671-0019 S3 SPK:0.025..	Standard	0.0250	6.341	2785	0.0255
bb B0030671-021	658606 L0027779-0001 SAM: Sample #1	Analyte	-	6.380	8474	7.8812
bb B0030671-022	658655 B0030671-0020 DUP:L0027779..	Analyte	-	6.364	9050	8.4200
bb B0030671-023	658598 L0027779-0001 SAM: Sample #1	Analyte	-	6.353	85530	8.0046
bb B0030671-024	658666 B0030671-0027 DUP:L0027779..	Analyte	-	6.353	88339	8.2678
bb B0030671-025	658607 L0027779-0002 SAM: Sample #2	Analyte	-	6.326	768	0.6641
bb B0030671-026	658600 L0027779-0002 SAM: Sample #2	Analyte	-	6.349	4495	0.4155
bb B0030671-027	658608 L0027779-0003 SAM: Sample #3	Analyte	-	6.361	497	0.4101

Quantify Compound Summary Report

Page 2

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

Job Code:

Printed: Tue Dec 18 06:13:01 2012

Compound 1: PFOA

File Name	Sample Description	Type	Std Conc.	RT	Area	ng/mL
bb B0030671-028	658601 L0027779-0003 SAM:Sample #3	Analyte	-	6.349	1657	0.1497
bb B0030671-029	658609 L0027779-0004 SAM:Sample #4	Analyte	-	6.364	435	0.3525
bb B0030671-030	658602 L0027779-0004 SAM:Sample #4	Analyte	-	6.357	462	0.0377
- B0030671-031	658656 B0030671-0021 WASH	Blank	-	Not Found	0	0.0000
bb B0030671-032	658657 B0030671-0022 S4 SPK:0.050..	Standard	0.0500	6.380	4904	0.0454
bb B0030671-033	658658 B0030671-0023 S5 SPK:0.100..	Standard	0.1000	6.353	10012	0.0932
bb B0030671-034	658659 B0030671-0024 S6 SPK:0.250..	Standard	0.2500	6.376	24319	0.2272
bb B0030671-035	658660 B0030671-0025 S7 SPK:0.500..	Standard	0.5000	6.353	52857	0.4945
bb B0030671-036	658661 B0030671-0026 S8 SPK:1.00n..	Standard	1.0000	6.364	104218	0.9755

Quantify Calibration Report

Page 1

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Calibration: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\CurveDB\B30671

Last modified: Tue Dec 18 05:58:45 2012

Printed: Tue Dec 18 06:13:02 2012

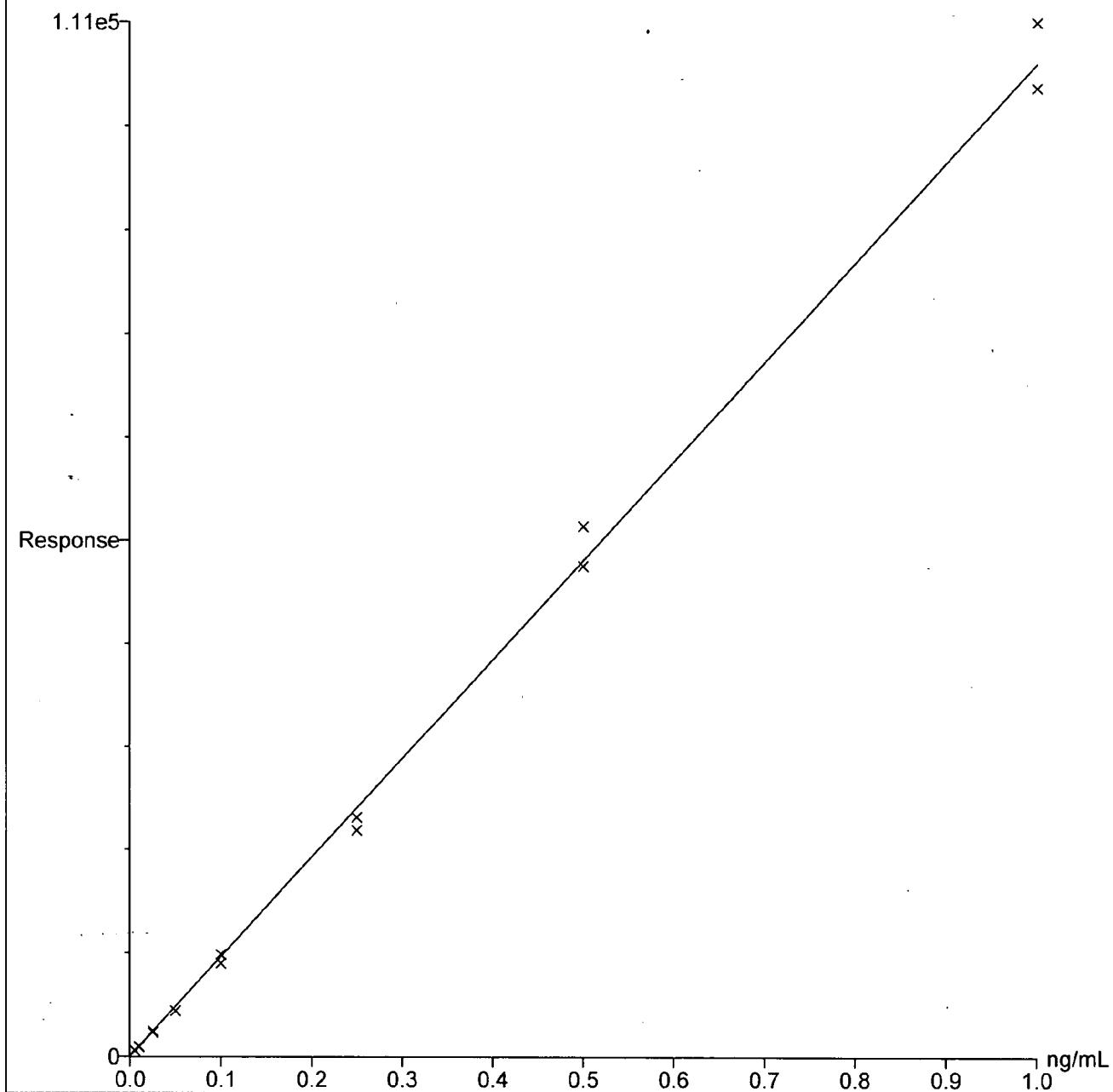
Compound 1 name: PFOA

Coefficient of Determination: 0.997583

Calibration curve: $106776 * x + 59.1121$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Sample Report

Page 1

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-001

Text:

1: PFOA

[658636] B0030671-0001 S0 SPK:0.000ng/mL

15-Dec-2012 11:43:36

LCMSMS #7

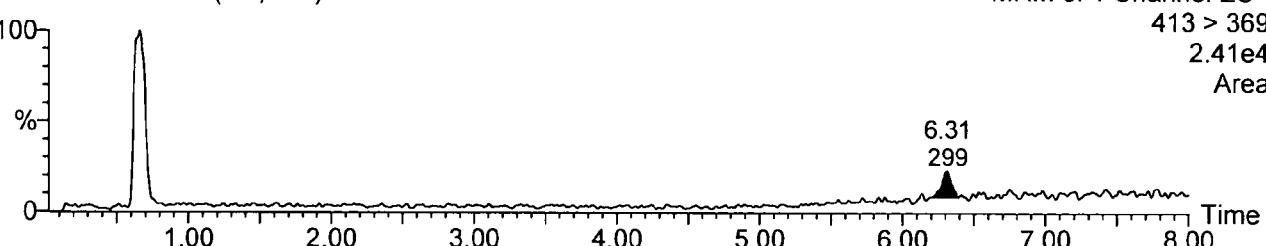
B0030671-001 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

2.41e4

Area



Quantify Sample Report

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Page 2

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

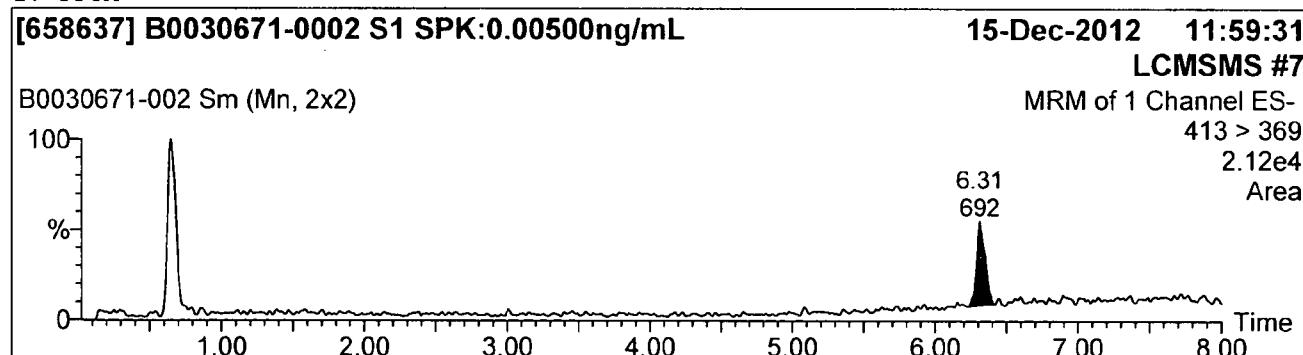
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-002

Text:

1: PFOA



Quantify Sample Report

Page 3

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

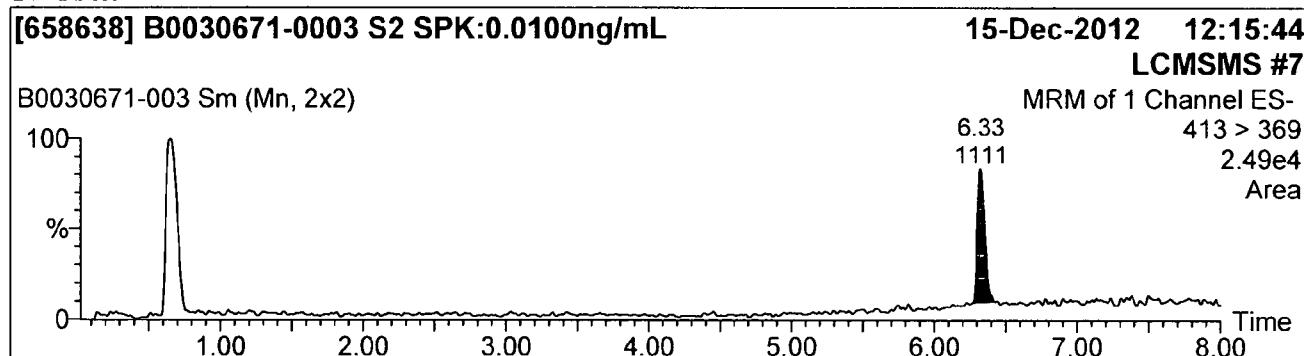
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-003

Text:

1: PFOA



Quantify Sample Report

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Page 4

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

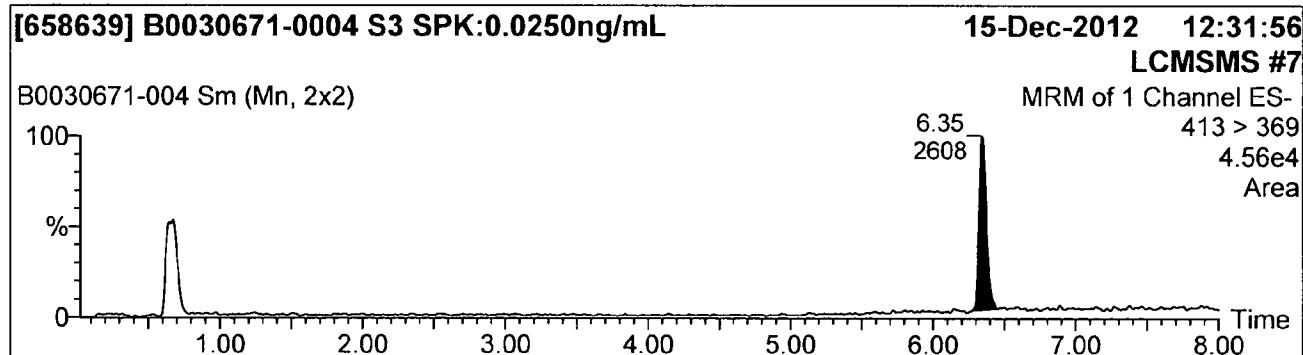
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-004

Text:

1: PFOA



Quantify Sample Report

Page 5

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

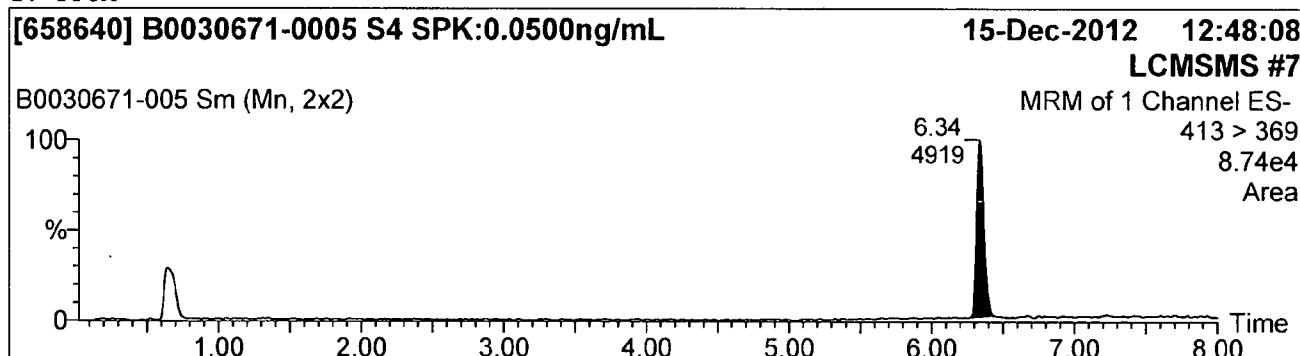
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-005

Text:

1: PFOA



Quantify Sample Report

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Page 6

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

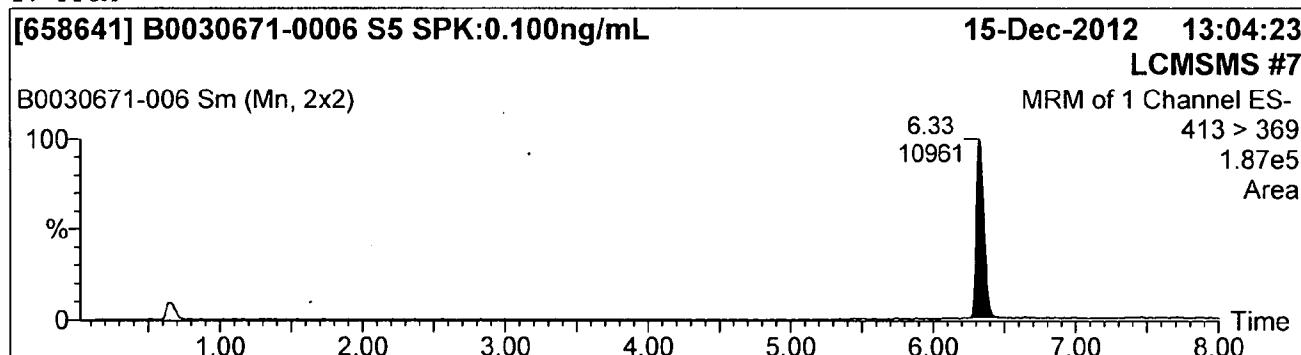
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-006

Text:

1: PFOA



Quantify Sample Report

Page 7

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

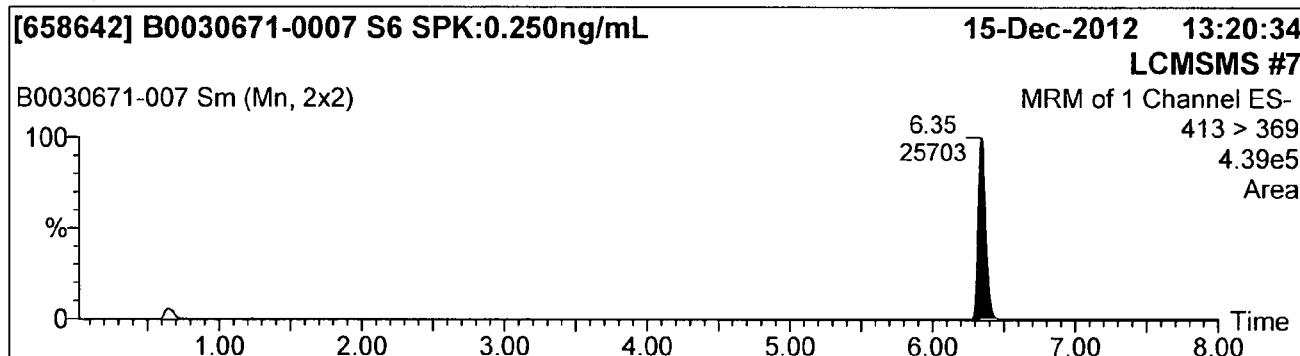
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-007

Text:

1: PFOA



Quantify Sample Report

Page 8

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

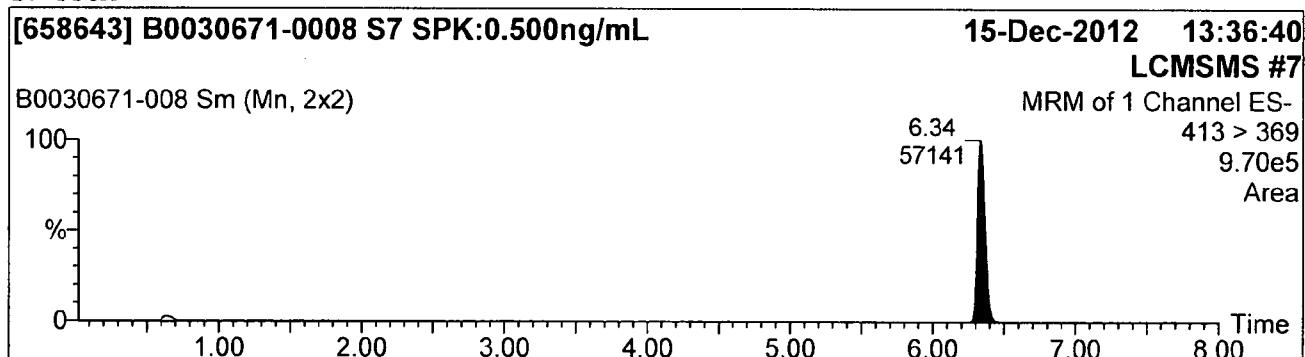
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-008

Text:

1: PFOA



Quantify Sample Report

Page 9

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

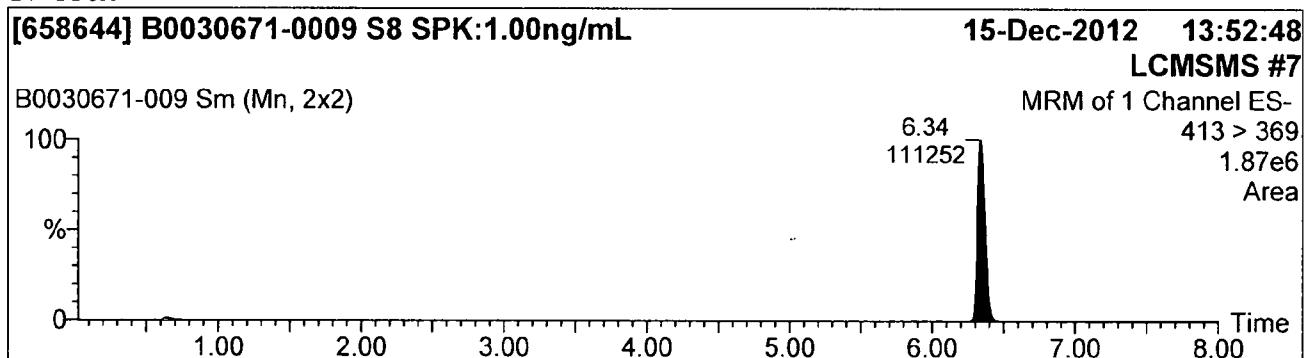
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-009

Text:

1: PFOA



Quantify Sample Report

Page 10

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

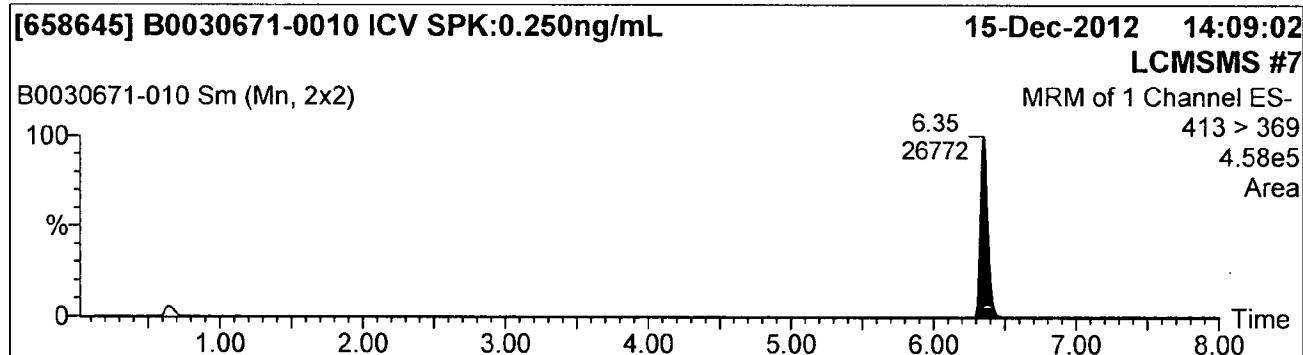
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-010

Text:

1: PFOA



Quantify Sample Report

Page 11

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

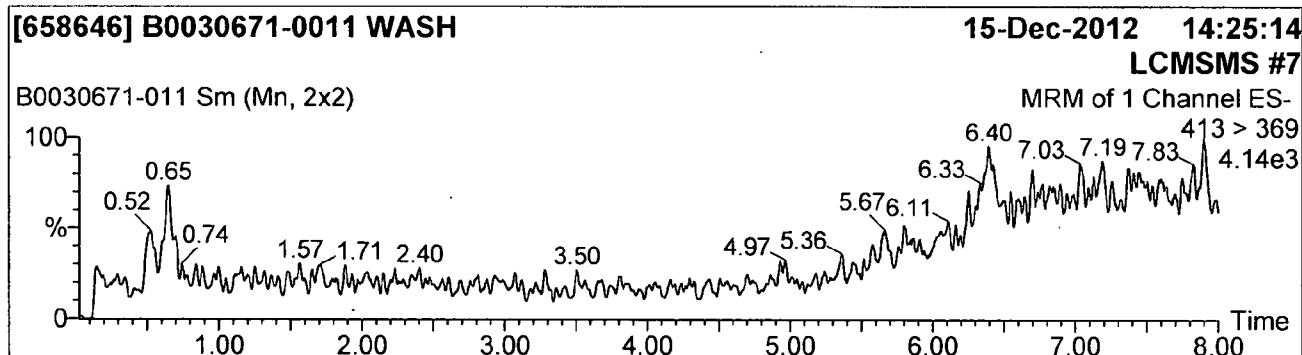
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-011

Text:

1: PFOA



Quantify Sample Report

Page 12

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

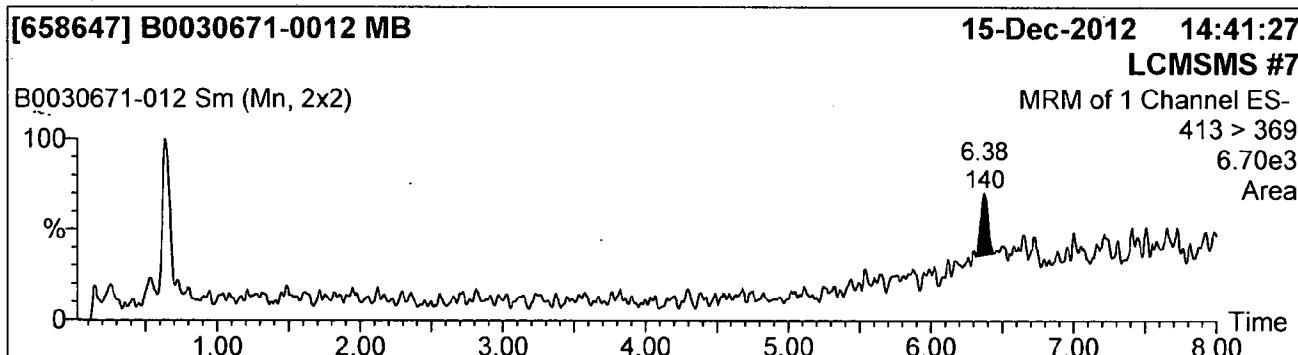
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-012

Text:

1: PFOA



Quantify Sample Report

Page 13

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

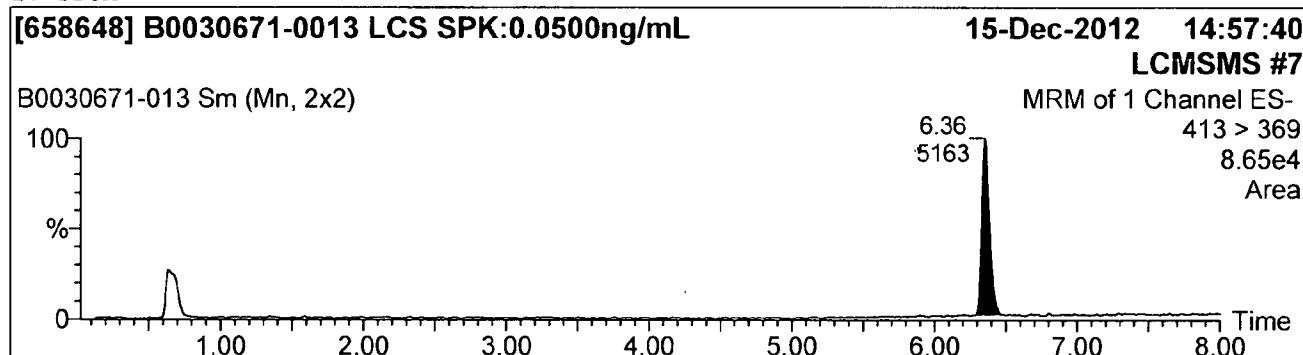
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-013

Text:

1: PFOA



Quantify Sample Report

Page 14

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

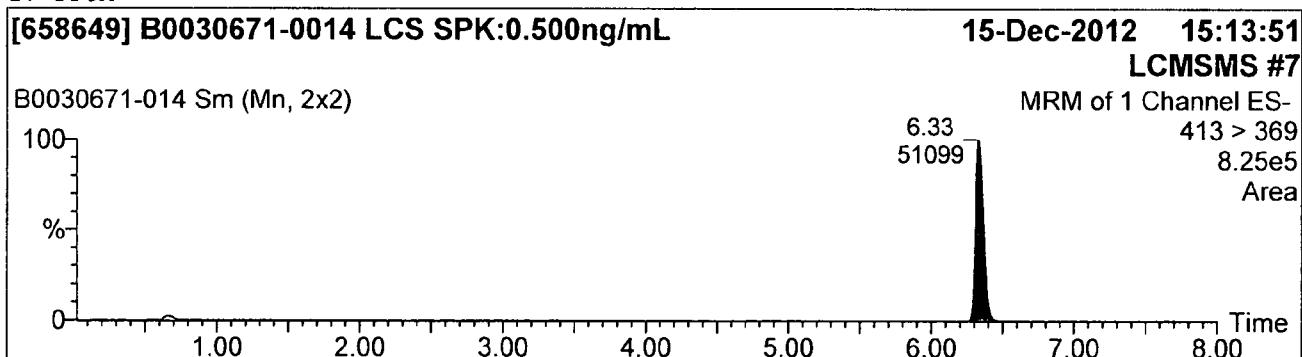
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-014

Text:

1: PFOA



Quantify Sample Report

Page 15

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

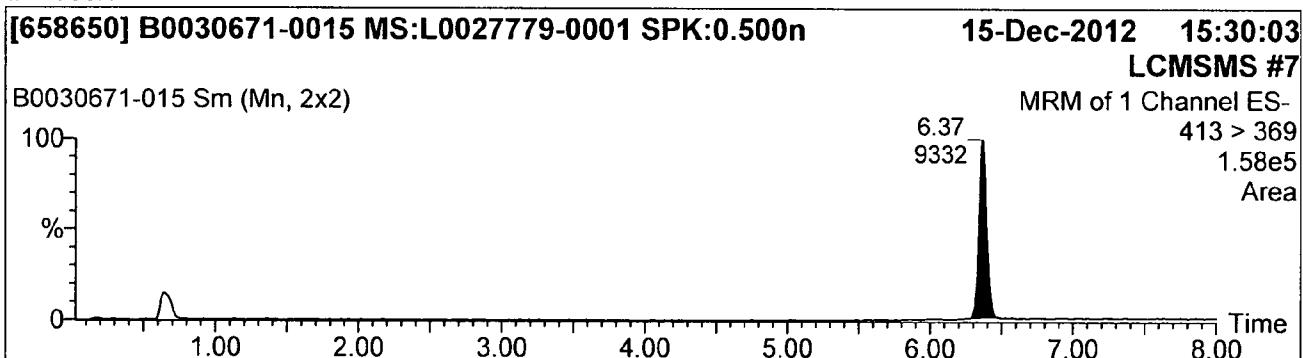
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-015

Text:

1: PFOA



Quantify Sample Report

Page 16

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

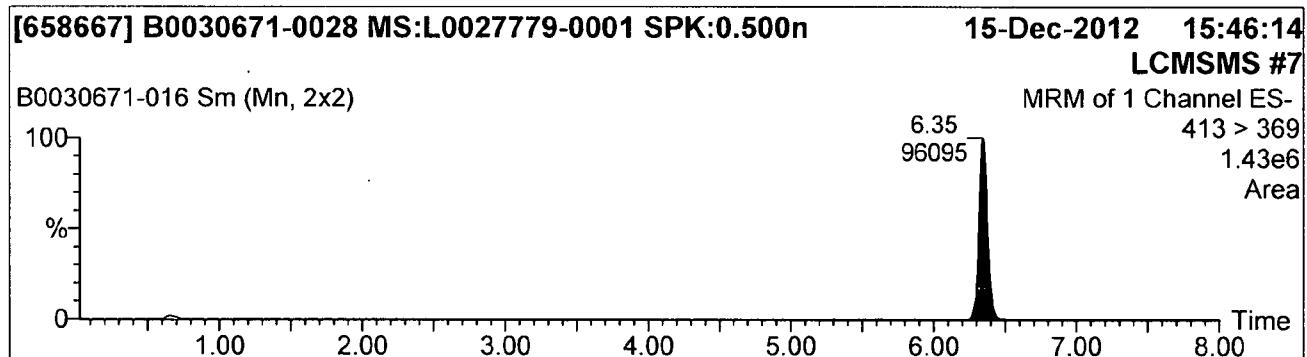
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-016

Text:

1: PFOA



Quantify Sample Report

Page 17

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

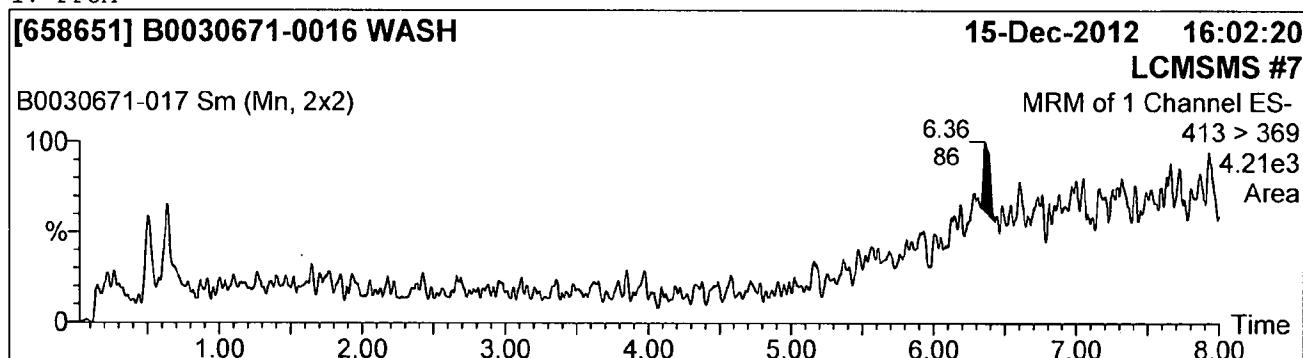
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-017

Text:

1: PFOA



Quantify Sample Report

Page 18

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-018

Text:

1: PFOA

[658652] B0030671-0017 S1 SPK:0.00500ng/mL

15-Dec-2012 16:18:35

LCMSMS #7

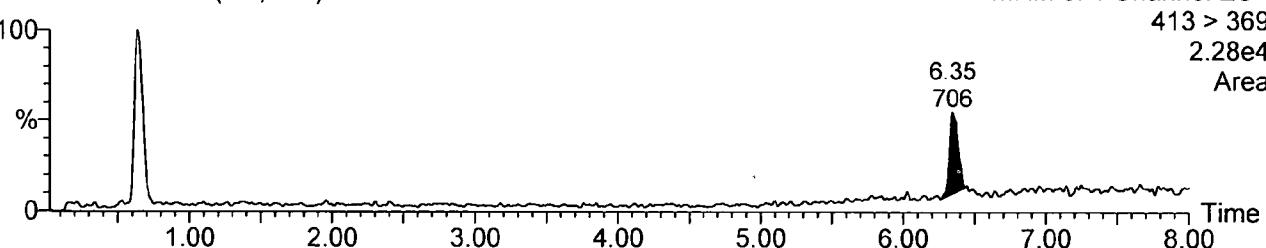
B0030671-018 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

2.28e4

Area



Quantify Sample Report

Page 19

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

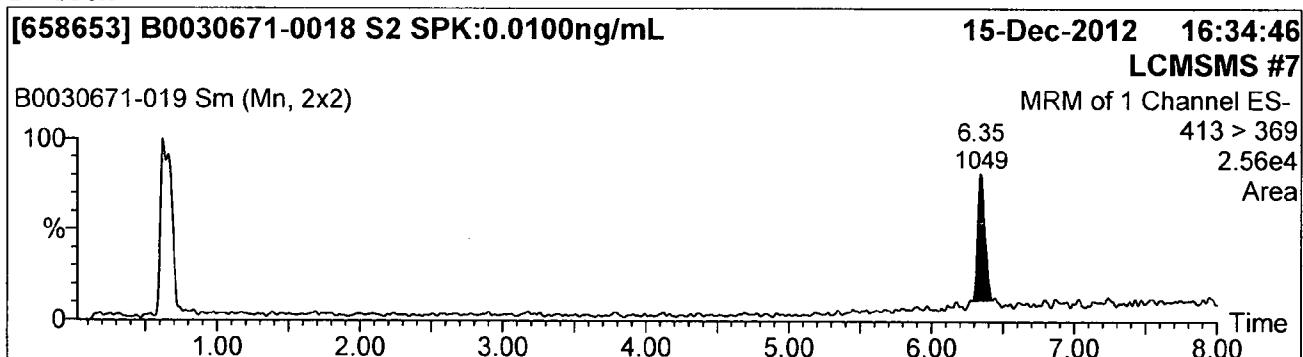
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-019

Text:

1: PFOA



Quantify Sample Report

Page 20

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

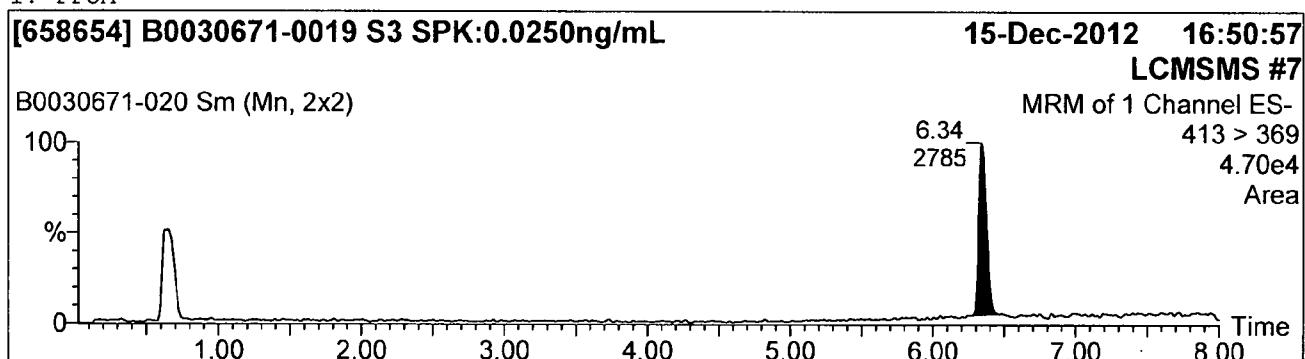
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-020

Text:

1: PFOA



Quantify Sample Report

Page 21

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

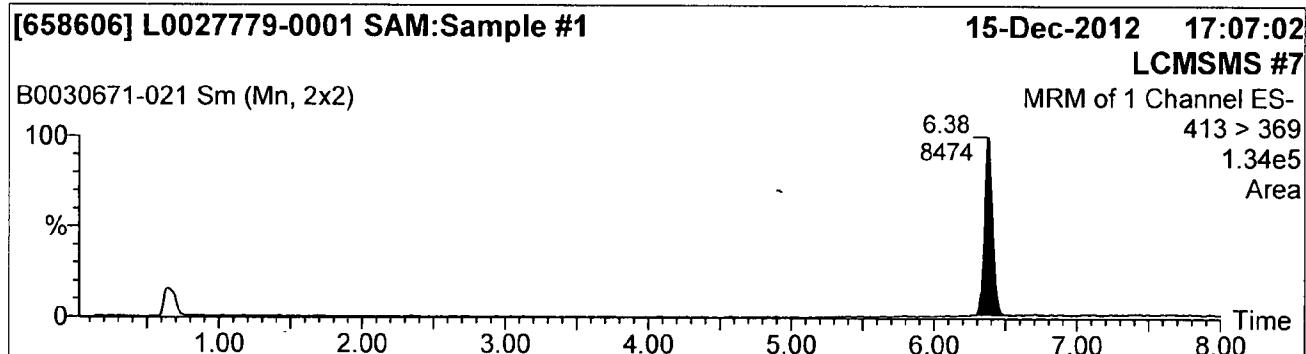
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-021

Text:

1: PFOA



Quantify Sample Report

Page 22

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

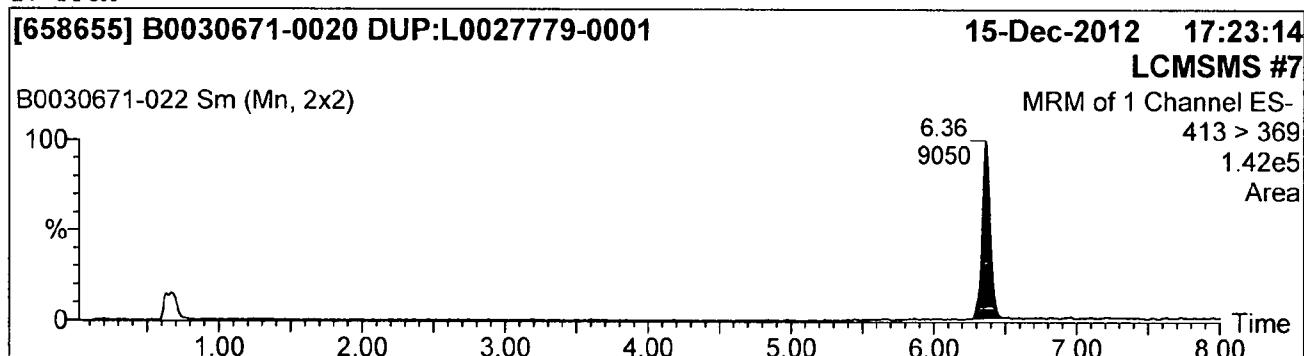
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-022

Text:

1: PFOA



Quantify Sample Report

Page 23

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

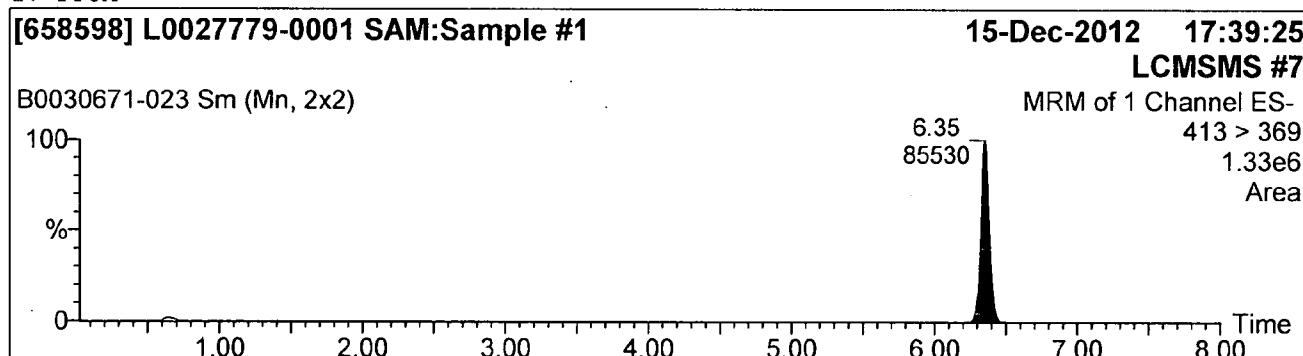
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-023

Text:

1: PFOA



Quantify Sample Report

Page 24

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-024

Text:

1: PFOA

[658666] B0030671-0027 DUP:L0027779-0001

15-Dec-2012 17:55:38

LCMSMS #7

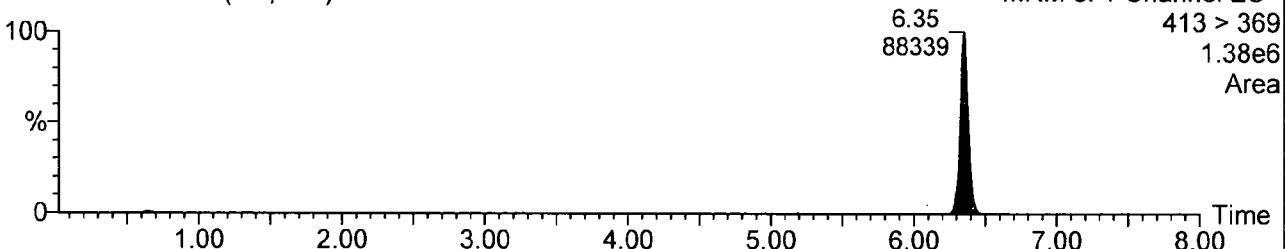
B0030671-024 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

1.38e6

Area



Quantify Sample Report

Page 25

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

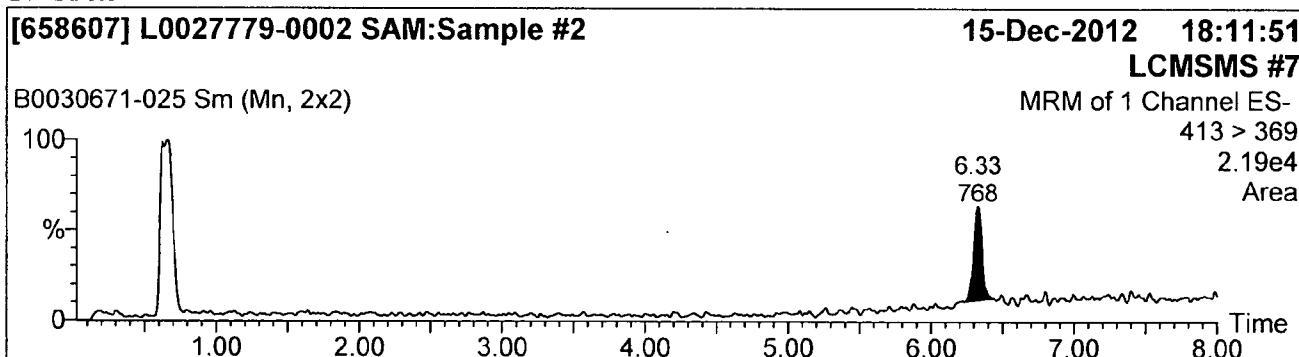
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-025

Text:

1: PFOA



Quantify Sample Report

Page 26

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

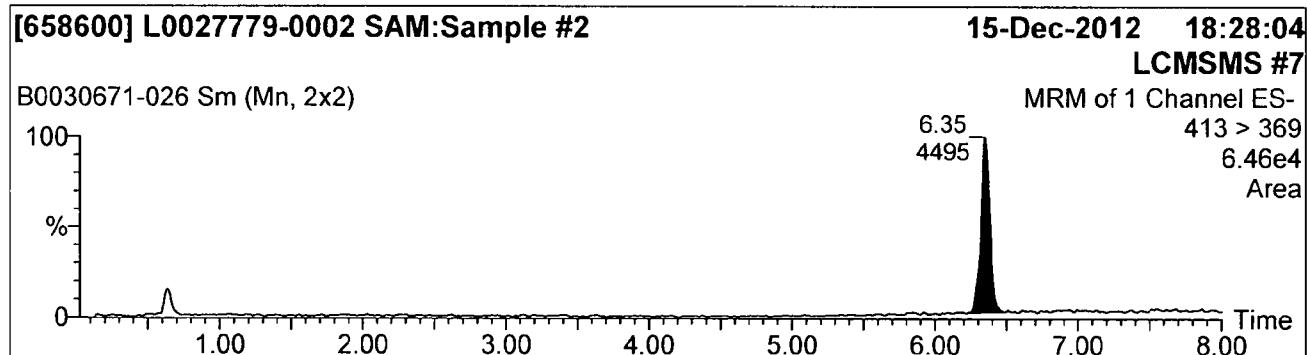
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-026

Text:

1: PFOA



Quantify Sample Report

Page 27

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

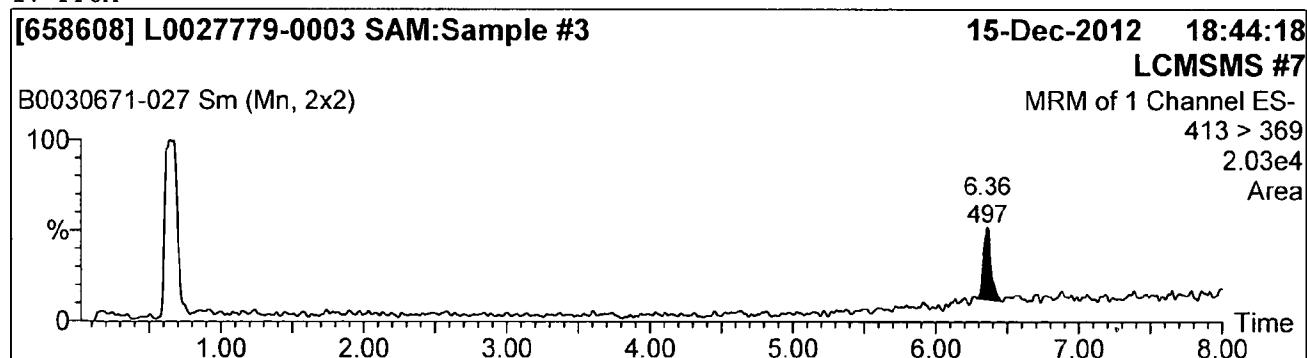
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-027

Text:

1: PFOA



Quantify Sample Report

Page 28

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

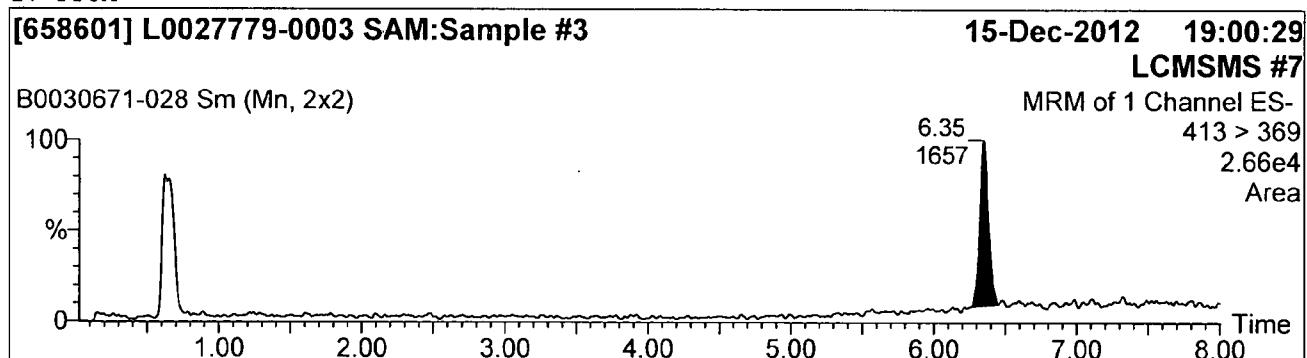
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-028

Text:

1: PFOA



Quantify Sample Report

Page 29

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

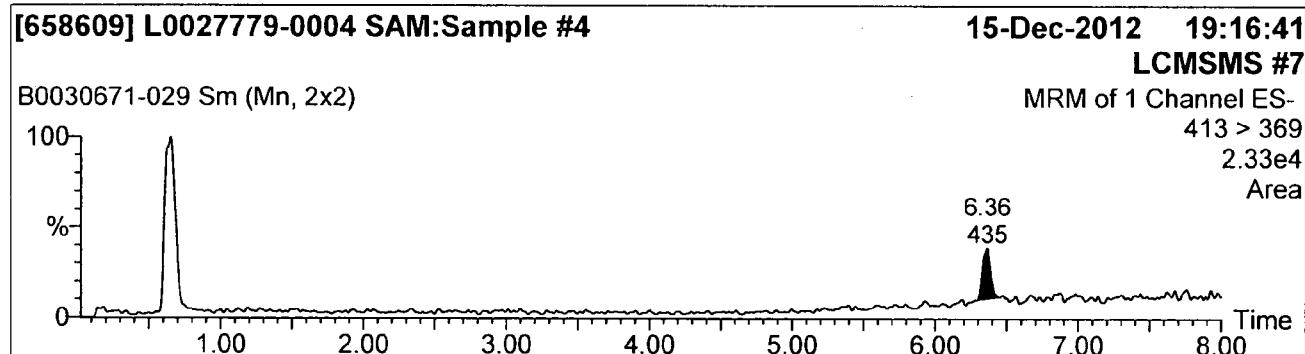
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-029

Text:

1: PFOA



Quantify Sample Report

Page 30

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-030

Text:

1: PFOA

[658602] L0027779-0004 SAM:Sample #4

15-Dec-2012 19:32:53

LCMSMS #7

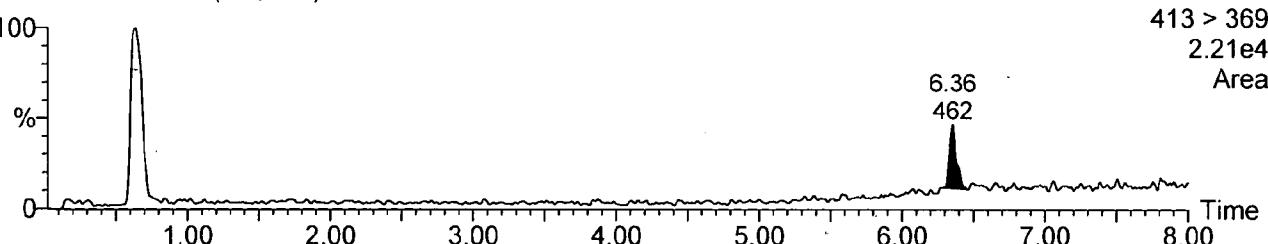
B0030671-030 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

2.21e4

Area



Quantify Sample Report

Page 31

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

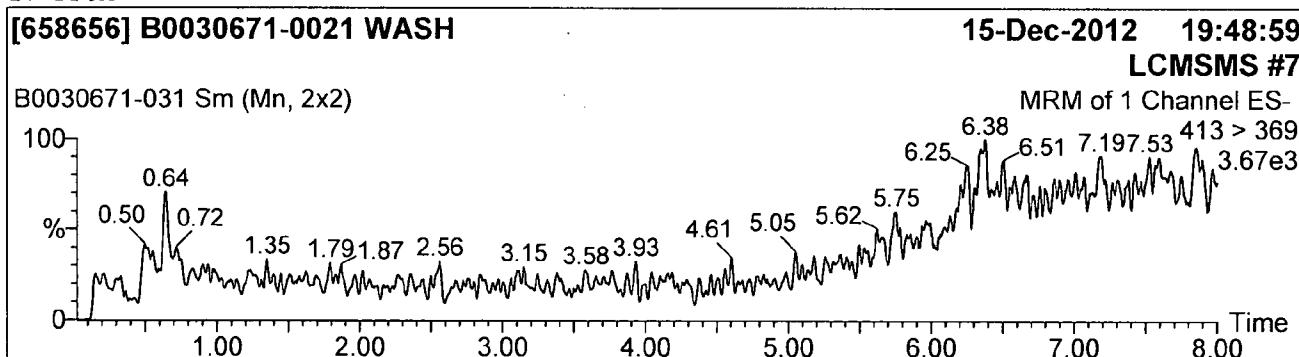
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-031

Text:

1: PFOA



Quantify Sample Report

Page 32

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

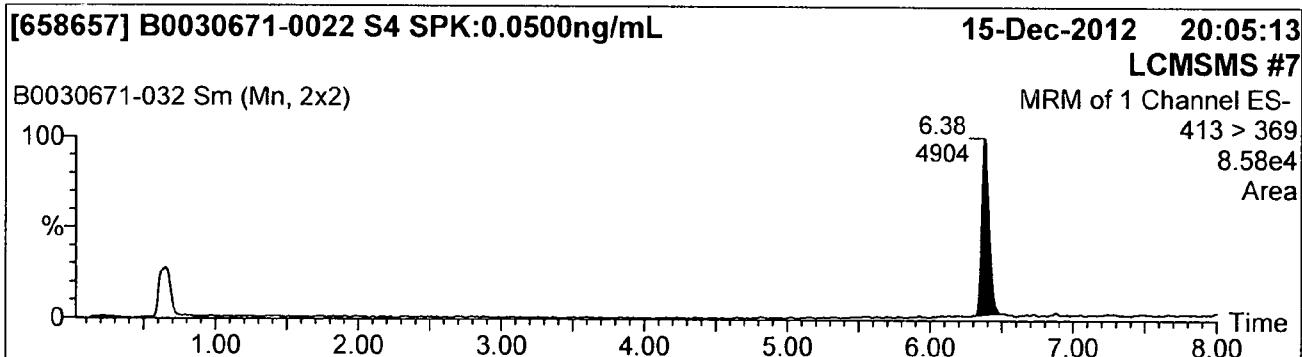
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-032

Text:

1: PFOA



Quantify Sample Report

Page 33

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

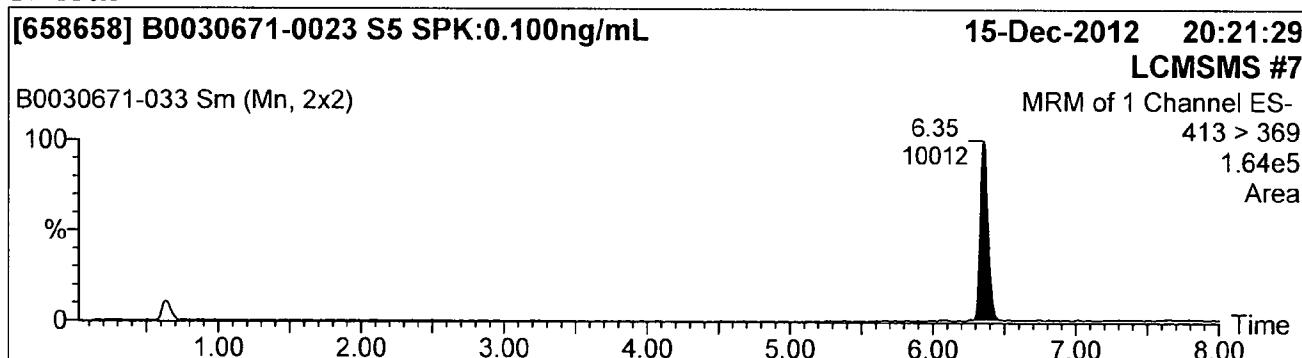
Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-033

Text:

1: PFOA



Quantify Sample Report

Page 34

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-034

Text:

1: PFOA

[658659] B0030671-0024 S6 SPK:0.250ng/mL

15-Dec-2012 20:37:36

LCMSMS #7

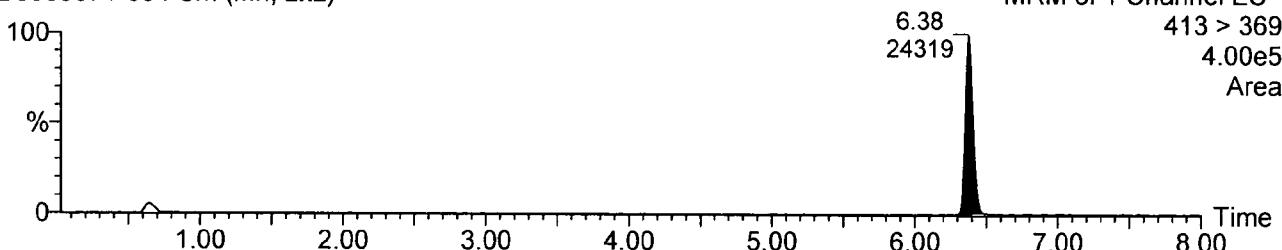
B0030671-034 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

4.00e5

Area



Quantify Sample Report

Page 35

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-035

Text:

1: PFOA

[658660] B0030671-0025 S7 SPK:0.500ng/mL

15-Dec-2012 20:53:49

LCMSMS #7

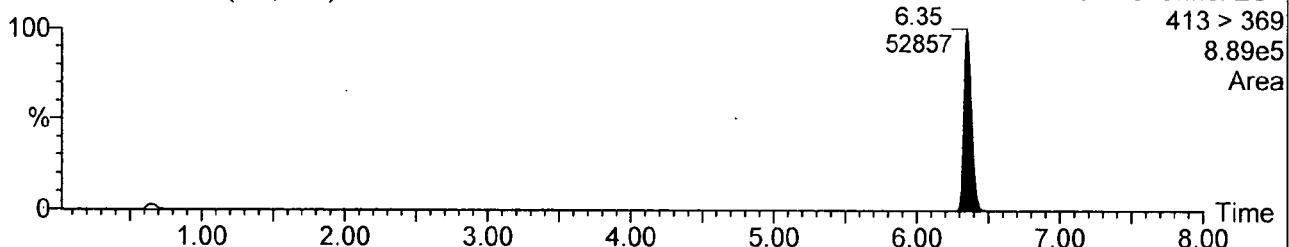
B0030671-035 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

8.89e5

Area



Quantify Sample Report

Page 36

Study No: L27779 Set No: B0030671 Ext.Date: 12/14/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030671

Last modified: Fri Dec 14 14:47:26 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 14 08:08:40 2012

Job Code:

Printed: Tue Dec 18 06:13:03 2012

Name: B0030671-036

Text:

1: PFOA

[658661] B0030671-0026 S8 SPK:1.00ng/mL

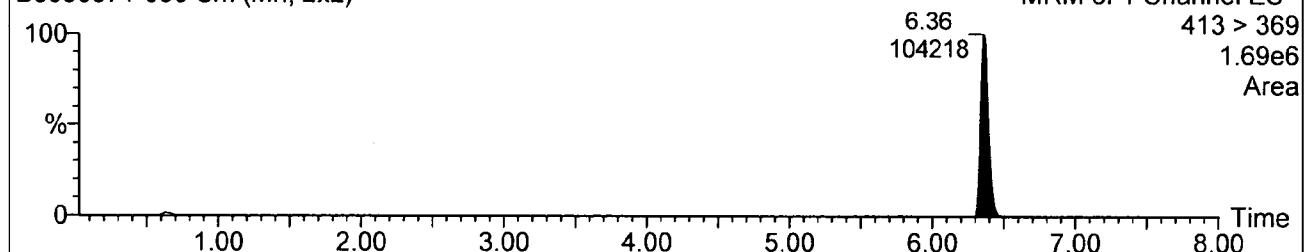
15-Dec-2012 21:10:03

LCMSMS #7

B0030671-036 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369



1	Chips who presented their batch and the date of preparation.
2	Applies this strategy to the lot size of chips to be prepared to fit the requirements of customers.
3	Will apply this strategy to the lot size of chips to be prepared to fit the requirements of customers.
4	Pre applies, measures out lots sizes and adjust to fit the requirements.
5	This strategy applies the standards and control procedures used by the operations of the company.
6	Setting up stations and cells in the production area to produce the required items.
7	Same standards as the standardized CIP SPE strategy, standard.
8	Waste which is not prepared to waste. Rejected due to taste.
9	Customer CIP SPE strategy (if it fits) and by passing -10 to the minimum time column.
10	Setting up stations and cells in the production area to produce the required items.
11	Waste which is not prepared to waste. Rejected due to taste.
12	Customer CIP SPE strategy (if it fits) and by passing -10 to the minimum time column.
13	Setting up stations and cells in the production area to produce the required items.
14	Waste which is not prepared to waste. Rejected due to taste.
15	Customer CIP SPE strategy (if it fits) and by passing -10 to the minimum time column.
16	Setting up stations and cells in the production area to produce the required items.
17	Customer CIP SPE strategy (if it fits) and by passing -10 to the minimum time column.
18	Setting up stations and cells in the production area to produce the required items.
19	Waste which is not prepared to waste. Rejected due to taste.
20	Customer CIP SPE strategy (if it fits) and by passing -10 to the minimum time column.
21	Setting up stations and cells in the production area to produce the required items.
22	Waste which is not prepared to waste. Rejected due to taste.

MPI Research

Limits [B0030726]

Analyte	Units	Limit of Detection	Limit of Quantitation
PFOA (TRIAL)	ng/mL	0.0043	0.0214

MPI Research

Observations [B0030726]

Test	Lab	Product	Observations
Number	Sample	Sample	by
	ID	ID	Test
659151	L0027779-0001	NONE	

MPI Research

Preparation Data [B0030726]

Test	Lab	Product	2830	2831	2832	2833	2834
Number	Sample	Sample	Sample Amount	Preparation Final	Aliquot Initial	Aliquot Final	Dilution Factor
	ID	ID	mL	mL	mL	mL	-
659315	B0030726-0011	WASHNC	40	5	1	1	1
659317	B0030726-0012	RB	40	5	1	1	1
659319	B0030726-0013	RS1	40	5	1	1	1
659320	B0030726-0014	RS2	40	5	1	1	1
659322	B0030726-0015	MS: L0027779-0001 / 659151	40	5	0.01	1	100
659324	B0030726-0016	WASHNC	40	5	1	1	1
659151	L0027779-0001	NONE	40	5	0.1	1	10
659331	B0030726-0020	DUP: L0027779-0001 / 659151	40	5	0.1	1	10
659333	B0030726-0021	WASHNC	40	5	1	1	1

MPI Research

Instrument Data [B0030726]

Test Number	Analyte Number	Lab ID	Client/Other ID	Aquisition Date	Analyte	Analyte Peak Area	Retention Time	Type	Result	IS	IS Peak Area
659305	2913	B0030726-0001	S0	21-Dec-2012 11:28:29	PFOA (TRIAL)	151	6.314	Blank	0.0010		
659306	2913	B0030726-0002	S1	21-Dec-2012 11:44:26	PFOA (TRIAL)	516	6.322	Standard	0.0051		
659307	2913	B0030726-0003	S2	21-Dec-2012 12:00:34	PFOA (TRIAL)	1004	6.318	Standard	0.0105		
659308	2913	B0030726-0004	S3	21-Dec-2012 12:16:37	PFOA (TRIAL)	2265	6.326	Standard	0.0246		
659309	2913	B0030726-0005	S4	21-Dec-2012 12:32:46	PFOA (TRIAL)	4517	6.318	Standard	0.0498		
659310	2913	B0030726-0006	S5	21-Dec-2012 12:48:57	PFOA (TRIAL)	9065	6.326	Standard	0.1006		
659311	2913	B0030726-0007	S6	21-Dec-2012 13:05:02	PFOA (TRIAL)	21913	6.322	Standard	0.2442		
659312	2913	B0030726-0008	S7	21-Dec-2012 13:21:07	PFOA (TRIAL)	46984	6.295	Standard	0.5244		
659313	2913	B0030726-0009	S8	21-Dec-2012 13:37:23	PFOA (TRIAL)	91443	6.299	Standard	1.0213		
659314	2913	B0030726-0010	ICV	21-Dec-2012 13:53:32	PFOA (TRIAL)	22580	6.311	QC	0.2516		
659315	2913	B0030726-0011	WASH	21-Dec-2012 14:09:46	PFOA (TRIAL)	56	6.299	Blank	0.0000		
659317	2913	B0030726-0012	MB	21-Dec-2012 14:25:58	PFOA (TRIAL)			Blank			
659319	2913	B0030726-0013	LCS	21-Dec-2012 14:42:14	PFOA (TRIAL)	4278	6.330	QC	0.0471		
659320	2913	B0030726-0014	LCS	21-Dec-2012 14:58:29	PFOA (TRIAL)	40438	6.326	QC	0.4512		
659322	2913	B0030726-0015	MS: Sample #1	21-Dec-2012 15:14:34	PFOA (TRIAL)	14622	6.307	QC	16.2713		
659324	2913	B0030726-0016	WASH	21-Dec-2012 15:30:47	PFOA (TRIAL)			Blank			
659326	2913	B0030726-0017	S1	21-Dec-2012 15:46:59	PFOA (TRIAL)	516	6.303	Standard	0.0051		
659327	2913	B0030726-0018	S2	21-Dec-2012 16:03:14	PFOA (TRIAL)	1074	6.353	Standard	0.0113		
659329	2913	B0030726-0019	S3	21-Dec-2012 16:19:22	PFOA (TRIAL)	2194	6.349	Standard	0.0238		
659151	2913	L0027779-0001	SAM: Sample #1	21-Dec-2012 16:35:28	PFOA (TRIAL)	67582	6.341	Analyte	7.5459		
659331	2913	B0030726-0020	DUP: Sample #1	21-Dec-2012 16:51:38	PFOA (TRIAL)	66700	6.361	Analyte	7.4473		
659333	2913	B0030726-0021	WASH	21-Dec-2012 17:07:49	PFOA (TRIAL)			Blank			
659334	2913	B0030726-0022	S4	21-Dec-2012 17:24:06	PFOA (TRIAL)	4186	6.334	Standard	0.0461		
659336	2913	B0030726-0023	S5	21-Dec-2012 17:40:19	PFOA (TRIAL)	8575	6.349	Standard	0.0951		
659337	2913	B0030726-0024	S6	21-Dec-2012 17:56:26	PFOA (TRIAL)	21175	6.338	Standard	0.2359		
659338	2913	B0030726-0025	S7	21-Dec-2012 18:12:34	PFOA (TRIAL)	45515	6.330	Standard	0.5080		
659339	2913	B0030726-0026	S8	21-Dec-2012 18:28:49	PFOA (TRIAL)	87239	6.384	Standard	0.9743		

MPI Research**Result [B0030726]**

Test	Lab	Product	Date	2913
Number	Sample	Sample	Of	PFOA (TRIAL)
	ID	ID	Analysis	ng/mL
659314	B0030726-0010	ICV	21-Dec-2012 13:53:32	0.2516
659317	B0030726-0012	RB	21-Dec-2012 14:25:58	0.000
659319	B0030726-0013	RS1	21-Dec-2012 14:42:14	0.0471
659320	B0030726-0014	RS2	21-Dec-2012 14:58:29	0.4512
659322	B0030726-0015	MS: L0027779-0001 / 659151	21-Dec-2012 15:14:34	16.2713
659151	L0027779-0001	NONE	21-Dec-2012 16:35:28	7.5459
659331	B0030726-0020	DUP: L0027779-0001 / 659151	21-Dec-2012 16:51:38	7.4473

MPI Research**Result Formatted [B0030726]**

Test	Lab	Product	2913
Number	Sample	Sample	PFOA (TRIAL)
	ID	ID	ng/mL
659314	B0030726-0010	ICV	0.25
659317	B0030726-0012	RB	ND
659319	B0030726-0013	RS1	0.047
659320	B0030726-0014	RS2	0.45
659322	B0030726-0015	MS: L0027779-0001 / 659151	16
659151	L0027779-0001	NONE	7.5
659331	B0030726-0020	DUP: L0027779-0001 / 659151	7.4

MPI Research

QC [B0030726]

Reference	Identity	Label	Units	PFOA (TRIAL)
				2913
659314	B0030726-0010	ICV: 0	ng/mL	0.2516
-	-	RS		
207920	SS0045592	RS		0.25000
ICV		RS	% Accuracy	101
659317	B0030726-0012	RB: 0	ng/mL	ND
-	-	RB		
-	-	RB		
RB		RB	Absolute	ND
659319	B0030726-0013	RS1: 0	ng/mL	0.0471
-	-	RS		
208090	SK0151285	RS		0.050001
RS1		RS	% Accuracy	94
659320	B0030726-0014	RS2: 0	ng/mL	0.4512
-	-	RS		
208091	SK0151286	RS		0.50001
RS2		RS	% Accuracy	90
659322	B0030726-0015	MS: 659151	ng/mL	16.2713
659151	L0027779-0001	CS	ng/mL	7.5459
208092	SK0151287	CS		10.000
MS		CS	% Recovery	87
659331	B0030726-0020	DUP: 659151	ng/mL	7.4473
659151	L0027779-0001	CD	ng/mL	7.5459
-	-	CD		
DUP		CD	% Difference	1.3

MPI Research**Calculated Result [B0030726]**

Test	Lab	Product	2915	2912	2914
Number	Sample	Sample	PFOA	APFO (TRIAL)	APFO
	ID	ID	ng/mL	ng/mL	ng/mL
659314	B0030726-0010	ICV	0.25	0.26	0.26
659317	B0030726-0012	RB	ND	ND	ND
659319	B0030726-0013	RS1	0.047	0.049	0.049
659320	B0030726-0014	RS2	0.45	0.47	0.47
659322	B0030726-0015	MS: L0027779-0001 / 659151	16	17	17
659151	L0027779-0001	NONE	7.5	7.9	7.9
659331	B0030726-0020	DUP: L0027779-0001 / 659151	7.4	7.8	7.8

Acceptance Criteria					
#	Requirement	Units	Criteria	Value	Pass/Fail
1	Chromatogram must show a peak of a product ion at 369 amu from a parent of 413.	-	-	-	Pass
2	Method blanks must not contain PFOA > LOD	-	-	-	Pass
3	Recoveries of control spikes and matrix spikes must be between 70 - 130 % of known values. If any control spike fails, the entire set must be re-extracted. Any matrix spike outside the acceptance limit should be evaluated by the analyst to determine if re-extraction is necessary	-	-	-	Pass
4	The correlation coefficient (R) for calibration curves generated must be R2 >= 0.985. If calibration results fall outside these limits, then the entire set should be reanalyzed.	R2	>= 0.985	0.999	Pass
5	The response from the check standard should be within +/- 15% of the average response from the 250 ng/L calibration standard concentrations.	%	+/- 15	5	Pass
6	Retention times between standards and samples must not drift more than +/- 2% within an analytical run. If retention time drift exceeds this limit within an analytical run, the set must be reanalyzed	-	-	-	Pass
Batch Acceptance Criteria Comment (reported in lieu of default)					

Vial	File Name	MS Method	HPLC Method	MS Tune File	Inj. Volume	
1	B0030726-001	008 PFOA	water_3	PFOA Tune	15	
2	B0030726-002	008 PFOA	water_3	PFOA Tune	15	
3	B0030726-003	008 PFOA	water_3	PFOA Tune	15	
4	B0030726-004	008 PFOA	water_3	PFOA Tune	15	
5	B0030726-005	008 PFOA	water_3	PFOA Tune	15	
6	B0030726-006	008 PFOA	water_3	PFOA Tune	15	
7	B0030726-007	008 PFOA	water_3	PFOA Tune	15	
8	B0030726-008	008 PFOA	water_3	PFOA Tune	15	
9	B0030726-009	008 PFOA	water_3	PFOA Tune	15	
10	B0030726-010	008 PFOA	water_3	PFOA Tune	15	
11	94	B0030726-011	008 PFOA	water_3	PFOA Tune	15
12	81	B0030726-012	008 PFOA	water_3	PFOA Tune	15
13	82	B0030726-013	008 PFOA	water_3	PFOA Tune	15
14	83	B0030726-014	008 PFOA	water_3	PFOA Tune	15
15	88	B0030726-015	008 PFOA	water_3	PFOA Tune	15
16	94	B0030726-016	008 PFOA	water_3	PFOA Tune	15
17	2	B0030726-017	008 PFOA	water_3	PFOA Tune	15
18	3	B0030726-018	008 PFOA	water_3	PFOA Tune	15
19	4	B0030726-019	008 PFOA	water_3	PFOA Tune	15
20	89	B0030726-020	008 PFOA	water_3	PFOA Tune	15
21	90	B0030726-022	008 PFOA	water_3	PFOA Tune	15
22	94	B0030726-023	008 PFOA	water_3	PFOA Tune	15
23	5	B0030726-024	008 PFOA	water_3	PFOA Tune	15
24	6	B0030726-025	008 PFOA	water_3	PFOA Tune	15
25	7	B0030726-026	008 PFOA	water_3	PFOA Tune	15
26	8	B0030726-027	008 PFOA	water_3	PFOA Tune	15
27	9	B0030726-028	008 PFOA	water_3	PFOA Tune	15

JKP
12/20/12

Verified By: GLR 12/20/12

STUDY NO. L27779

	Sample Description	Sample Type	DF	PFOA (ng/mL)	
1	[659305] B0030726-0001 S0 SPK:0.000ng/mL	Blank	1	0.000	Ikf 12/20/12
2	[659306] B0030726-0002 S1 SPK:0.00500ng/mL	Standard	1	0.00500	
3	[659307] B0030726-0003 S2 SPK:0.0100ng/mL	Standard	1	0.0100	
4	[659308] B0030726-0004 S3 SPK:0.0250ng/mL	Standard	1	0.0250	
5	[659309] B0030726-0005 S4 SPK:0.0500ng/mL	Standard	1	0.0500	
6	[659310] B0030726-0006 S5 SPK:0.100ng/mL	Standard	1	0.100	
7	[659311] B0030726-0007 S6 SPK:0.250ng/mL	Standard	1	0.250	
8	[659312] B0030726-0008 S7 SPK:0.500ng/mL	Standard	1	0.500	
9	[659313] B0030726-0009 S8 SPK:1.00ng/mL	Standard	1	1.00	
10	[659314] B0030726-0010 ICV SPK:0.250ng/mL	QC	1	0.250	
11	[659315] B0030726-0011 WASH	Blank	1	0	
12	[659317] B0030726-0012 MB	Blank	1	0	
13	[659319] B0030726-0013 LCS SPK:0.0500ng/mL	QC	1	0.0500	
14	[659320] B0030726-0014 LCS SPK:0.500ng/mL	QC	1	0.500	
15	[659322] B0030726-0015 MS:L0027779-0001 SPK:10.0ng/mL	QC	100	10.0	
16	[659324] B0030726-0016 WASH	Blank	1	0	
17	[659326] B0030726-0017 S1 SPK:0.00500ng/mL	Standard	1	0.00500	
18	[659327] B0030726-0018 S2 SPK:0.0100ng/mL	Standard	1	0.0100	
19	[659329] B0030726-0019 S3 SPK:0.0250ng/mL	Standard	1	0.0250	
20	[659151] L0027779-0001 SAM:Sample #1	Analyte	10	0	
21	[659331] B0030726-0020 DUP:L0027779-0001	Analyte	10	0	
22	[659333] B0030726-0021 WASH	Blank	1	0	
23	[659334] B0030726-0022 S4 SPK:0.0500ng/mL	Standard	1	0.0500	
24	[659336] B0030726-0023 S5 SPK:0.100ng/mL	Standard	1	0.100	
25	[659337] B0030726-0024 S6 SPK:0.250ng/mL	Standard	1	0.250	
26	[659338] B0030726-0025 S7 SPK:0.500ng/mL	Standard	1	0.500	
27	[659339] B0030726-0026 S8 SPK:1.00ng/mL	Standard	1	1.00	

Method File:
Last Modified:C:\MASSLYNX\008 APFO 2.PRO\ACQUDB\water_3
Thursday, December 20, 2012 16:10:35

Printed:

Thursday, December 20, 2012 16:16:46

HP1100 LC Pump Initial Conditions**Solvents**

A%	70.0
B%	30.0
C%	0.0
D%	0.0

Flow (ml/min)	0.400
Stop Time (mins)	15.0
Min Pressure (bar)	0
Max Pressure (bar)	400
Oven Temperature Left(°C)	35.0
Oven Temperature Right(°C)	35.0

JKP
12/20/12**HP1100 LC Pump Gradient Timetable**

The gradient Timetable contains 8 entries which are :

Time	A%	B%	C%	D%	Flow	Pressure
0.00	70.0	30.0	0.0	0.0	0.400	400
0.40	70.0	30.0	0.0	0.0	0.400	400
2.00	10.0	90.0	0.0	0.0	0.400	400
7.00	10.0	90.0	0.0	0.0	0.400	400
7.50	0.0	100.0	0.0	0.0	0.400	400
9.00	0.0	100.0	0.0	0.0	0.400	400
9.50	70.0	30.0	0.0	0.0	0.400	400
15.00	70.0	30.0	0.0	0.0	0.400	400

HP1100 LC Pump External Event Timetable

The Timetable contains 4 entries which are :

Time	Column Switch	Contact1	Contact2	Contact3	Contact4
Initial	Off	Off	Off	Off	Off
0.00	Off	On	Off	Off	Off
0.10	Off	Off	On	Off	Off
8.00	Off	Off	Off	On	Off

HP1100 Autosampler Initial Conditions

Draw Speed	200.0
Eject Speed (μl/min)	200
Draw Position (mm)	0.10
Stop Time (mins)	15.00
Injection Volume(μl)	15.0
Vial Number	6

Scanning Method Report

Page 1

Method: C:\MASSLYNX\008 APFO 2.PRO\ACQUDB\008 PFOA

Last Modified: Tue Oct 18 15:04:59 2011

Printed: Thu Dec 20 16:16:57 2012

Solvent Delay (mins) : 0.00

Function : 1 MRM of 1 Mass Pair (ESP-)

Inter Channel Delay (Secs) : 0.03

Span (Daltons) : 0.00

Start Time (Mins) : 0.00

End Time (Mins) : 8.00

Repeats :

Channel Parent Daughter Dwell (Secs) Coll Energy (eV) Cone (V)

1	413.00	369.00	0.20	10	10
---	--------	--------	------	----	----

11/02/11
TAC

TAC EPA 00232

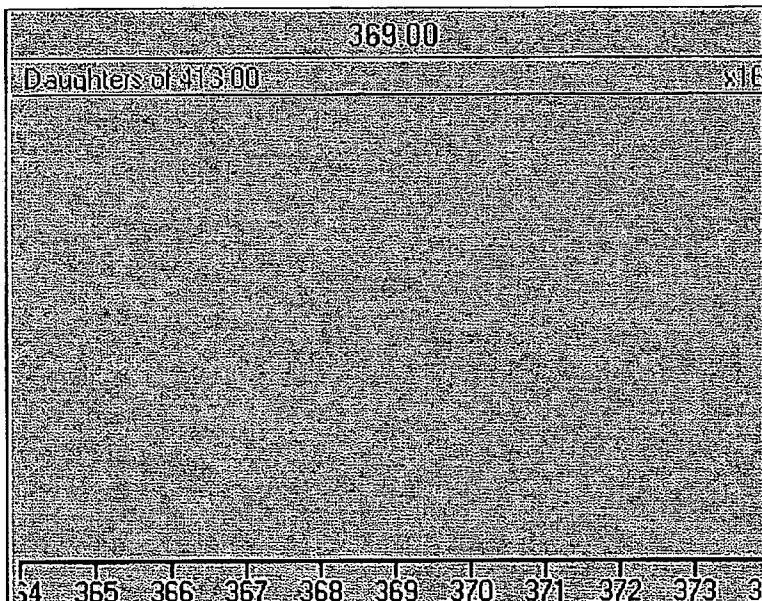
000223

Tuning Method Report

Page 1

Method: C:\MASSLYNX\008 APFO 2.PRO\ACQUDB\PFOA TUNE

Printed: Thu Dec 20 16:17:15 2012



Dau 413.00

SOURCE (ESP-)	Set	Rdbk	Analyser	Set	Rdbk
Capillary	3.06	-3.00	LM Res 1	10.0	
Cone	10	-10	HM Res 1	10.0	
Hexapole 1	0.4		IEnergy 1	2.0	
Aperture 1	0.2		Entrance	8	18
Hexapole 2	0.4		Collision	10	9
Source Block Temp.	100	100	Exit	8	18
Desolvation Temp.	300	300	LM Res 2	9.3	
			HM Res 2	9.4	
			IEnergy 2	2.0	
			Multiplier	700	-694
Pressures	Rdbk		Gas Flows	Rdbk	
Analyser Vacuum	OFF		Cone Gas	161.4	
Gas Cell	1.0e-3		Desolvation	651.6	

LOD and LOQ Determination

MPI Study No.: L27668
Set No: B30415
Extraction Date: 11/27/12
Analyzed on: 12/02/12

The height of the first 0.005 ng/mL standard of the analytical run is measured in centimeters and recorded. The height of the noise in a one minute range before the PFOA retention time in the reagent control is measured in centimeters and recorded. The noise height is then divided by the standard height. The result is converted to ng/mL by multiplying by the concentration of the standard measured (0.005 ng/mL). The LOD is calculated by taking 3 times the signal to noise ratio in ng/mL. The LOQ is calculated by taking 5 times the LOD.

MPI ID	Concentration (ng/mL)	Height (cm)
B0030415-0002	0.005	6.3
Reagent Control	0	1.8

Signal to Noise Ratio = [height of the noise in the reagent control (cm) / height of the 0.005 ng/mL standard(cm)] x 0.005 ng/mL

Signal to Noise Ratio (ng/mL) = 0.00143 ng/mL
LOD = 0.0043 ng/mL
LOQ = 0.0214 ng/mL

Verified By: ASD 12/3/12

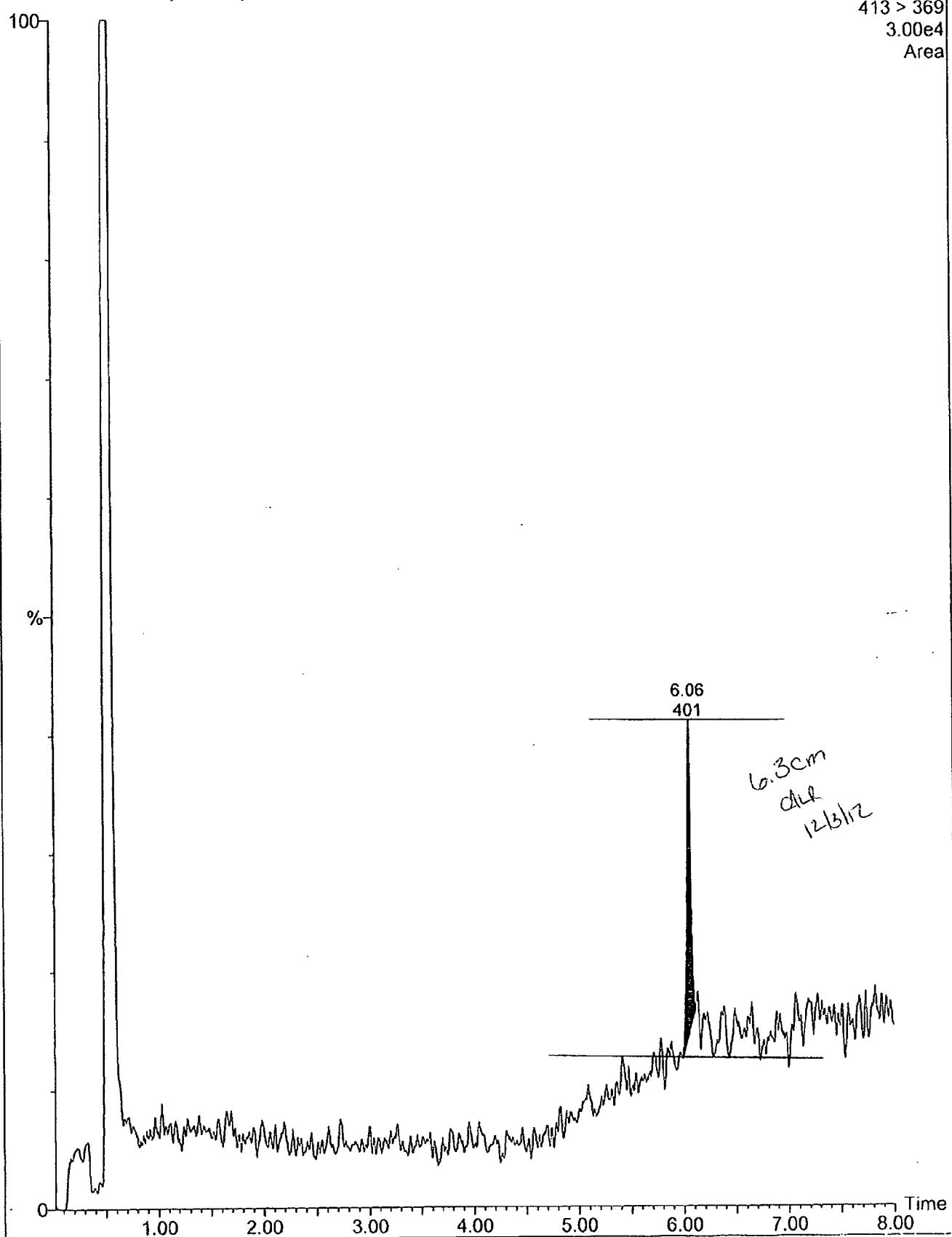
[654591] B0030415-0002 S1 SPK:0.00500ng/mL

02-Dec-2012 06:43:59

LCMSMS #7

B0030415-002 Sm (Mn, 2x2)

MRM of 1 Channel ES-
413 > 369
3.00e4
Area



TAC EPA 00235

000226

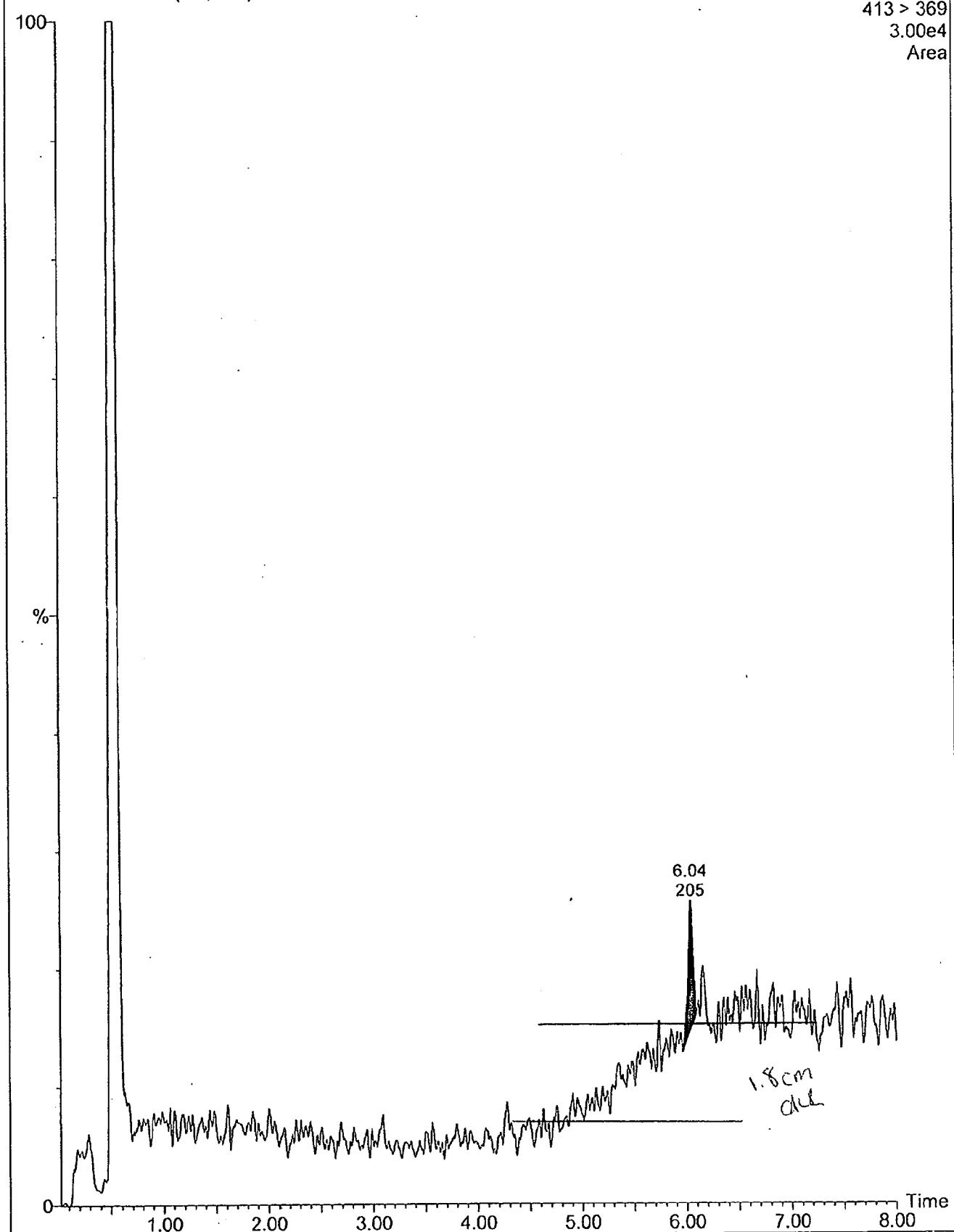
[654601] B0030415-0012 MB

02-Dec-2012 09:25:54

LCMSMS #7

B0030415-012 Sm (Mn, 2x2)

MRM of 1 Channel ES-
413 > 369
3.00e4
Area



TAC EPA 00236

000227

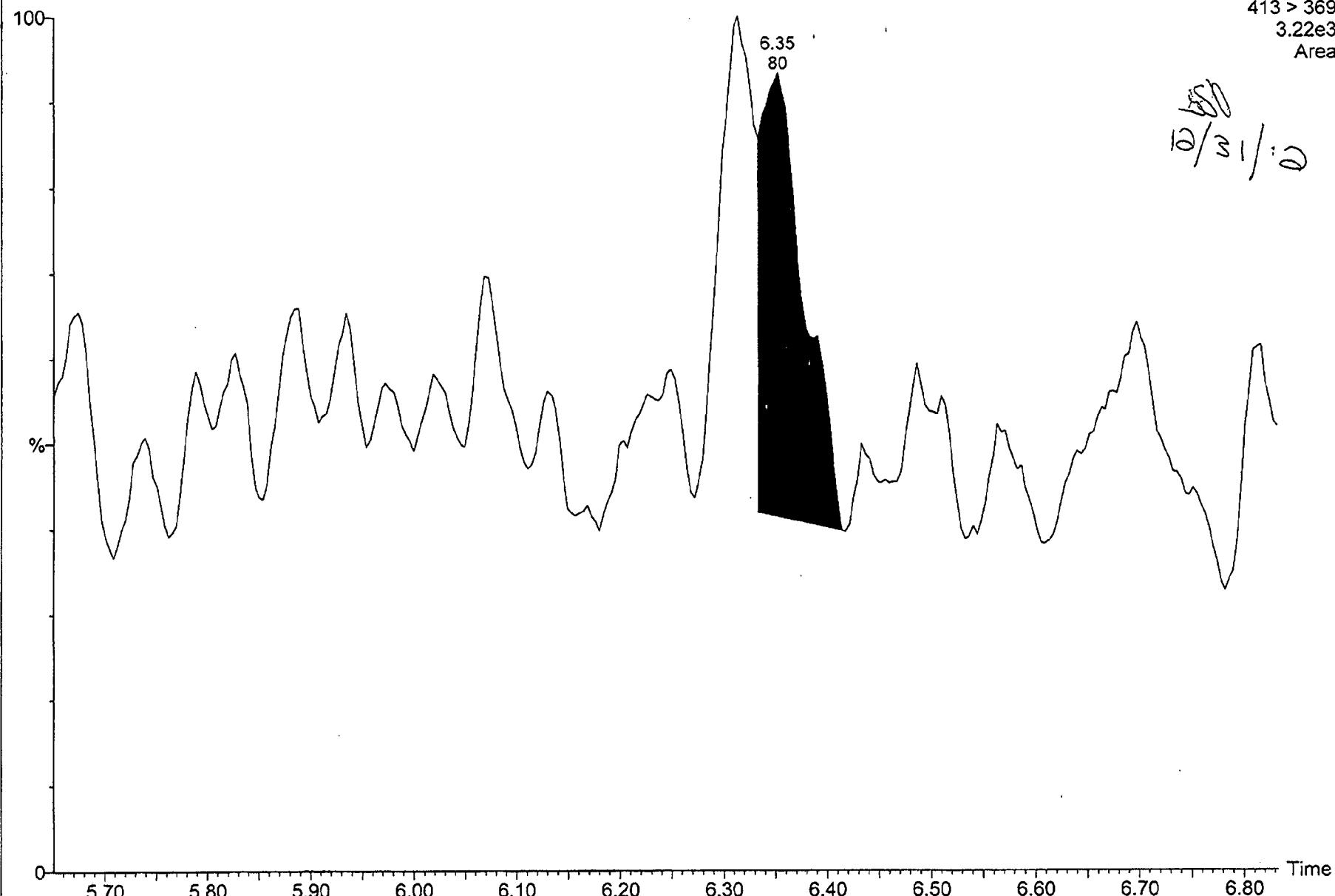
[659305] B0030726-0001 S0 SPK:0.000ng/mL

21-Dec-2012 11:28:29

LCMSMS #7

MRM of 1 Channel ES-
413 > 369
3.22e3
Area

B0030726-001 Sm (Mn, 2x2)



TAC EPA 00237

000228

Quantify Compound Summary Report

Page 1

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

Job Code:

Printed: Fri Dec 28 14:18:24 2012

Compound 1: PFOA

.. File Name	Sample Description	Type	Std Conc.	RT	Area	ng/mL
MM B0030726-001	659305 B0030726-0001 S0 SPK:0.000..	Blank	-	6.314	151	0.0010
bb B0030726-002	659306 B0030726-0002 S1 SPK:0.005..	Standard	0.0050	6.322	516	0.0051
bb B0030726-003	659307 B0030726-0003 S2 SPK:0.010..	Standard	0.0100	6.318	1004	0.0105
bb B0030726-004	659308 B0030726-0004 S3 SPK:0.025..	Standard	0.0250	6.326	2265	0.0246
bb B0030726-005	659309 B0030726-0005 S4 SPK:0.050..	Standard	0.0500	6.318	4517	0.0498
bb B0030726-006	659310 B0030726-0006 S5 SPK:0.100..	Standard	0.1000	6.326	9065	0.1006
bb B0030726-007	659311 B0030726-0007 S6 SPK:0.250..	Standard	0.2500	6.322	21913	0.2442
bb B0030726-008	659312 B0030726-0008 S7 SPK:0.500..	Standard	0.5000	6.295	46984	0.5244
bb B0030726-009	659313 B0030726-0009 S8 SPK:1.00n..	Standard	1.0000	6.299	91443	1.0213
bb B0030726-010	659314 B0030726-0010 ICV SPK:0.25..	QC	0.2500	6.311	22580	0.2516
bb B0030726-011	659315 B0030726-0011 WASH	Blank	-	6.299	56	0.0000
- B0030726-012	659317 B0030726-0012 MB	Blank	-	Not Found	0	0.0000
bb B0030726-013	659319 B0030726-0013 LCS SPK:0.05..	QC	0.0500	6.330	4278	0.0471
bb B0030726-014	659320 B0030726-0014 LCS SPK:0.50..	QC	0.5000	6.326	40438	0.4512
bb B0030726-015	659322 B0030726-0015 MS:L0027779-..	QC	10.0000	6.307	14622	16.2713
- B0030726-016	659324 B0030726-0016 WASH	Blank	-	Not Found	0	0.0000
bb B0030726-017	659326 B0030726-0017 S1 SPK:0.005..	Standard	0.0050	6.303	516	0.0051
bb B0030726-018	659327 B0030726-0018 S2 SPK:0.010..	Standard	0.0100	6.353	1074	0.0113
bb B0030726-019	659329 B0030726-0019 S3 SPK:0.025..	Standard	0.0250	6.349	2194	0.0238
bb B0030726-020	659151 L0027779-0001 SAM: Sample #1	Analyte	-	6.341	67582	7.5459
bb B0030726-022	659331 B0030726-0020 DUP:L0027779..	Analyte	-	6.361	66700	7.4473
- B0030726-023	659333 B0030726-0021 WASH	Blank	-	Not Found	0	0.0000
bb B0030726-024	659334 B0030726-0022 S4 SPK:0.050..	Standard	0.0500	6.334	4186	0.0461
bb B0030726-025	659336 B0030726-0023 S5 SPK:0.100..	Standard	0.1000	6.349	8575	0.0951
bb B0030726-026	659337 B0030726-0024 S6 SPK:0.250..	Standard	0.2500	6.338	21175	0.2359
bb B0030726-027	659338 B0030726-0025 S7 SPK:0.500..	Standard	0.5000	6.330	45515	0.5080
bb B0030726-028	659339 B0030726-0026 S8 SPK:1.00n..	Standard	1.0000	6.384	87239	0.9743

Quantify Calibration Report

Page 1

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Calibration: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\CurveDB\B30726

Last modified: Fri Dec 28 14:12:31 2012

Printed: Fri Dec 28 14:18:25 2012

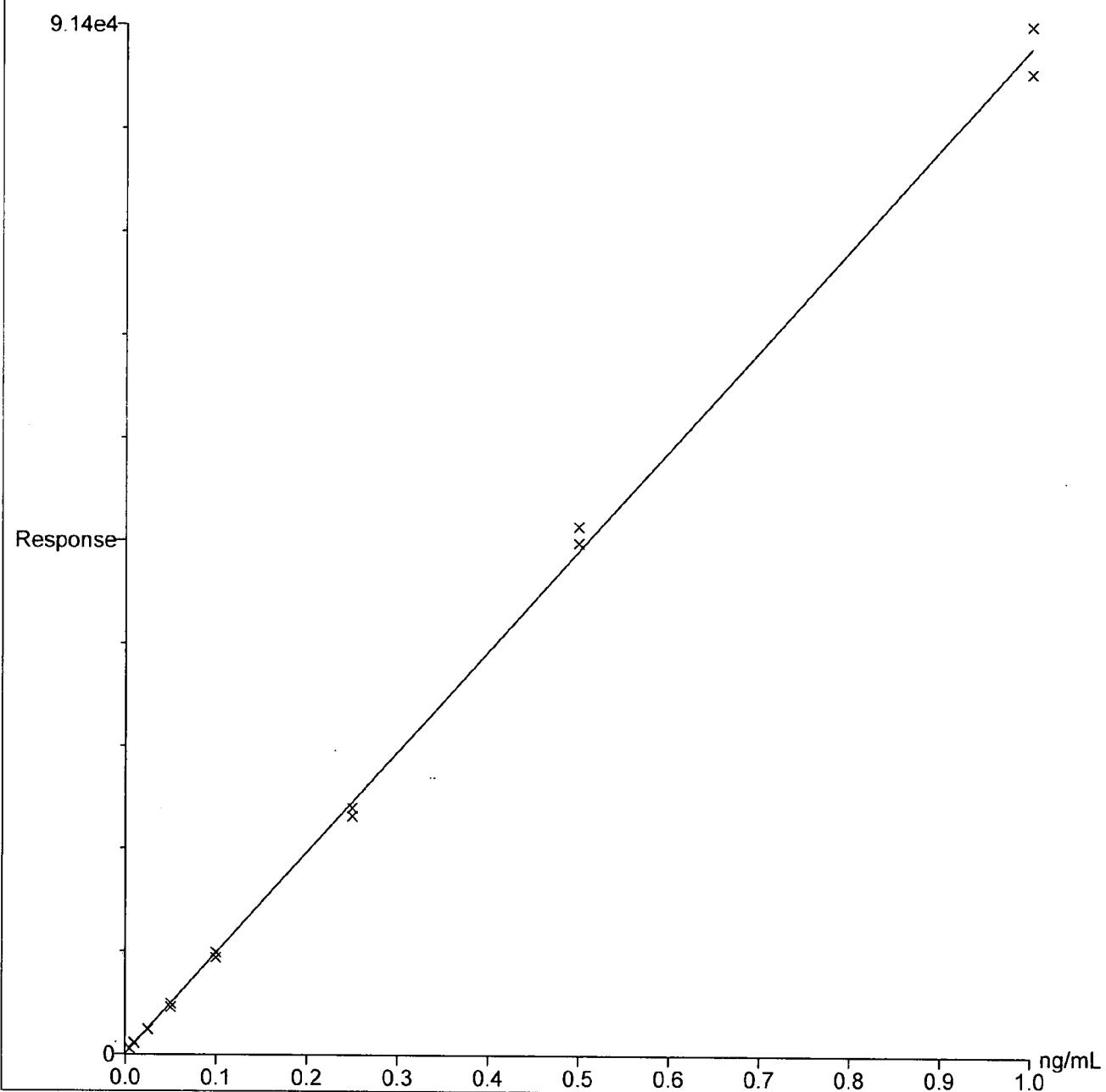
Compound 1 name: PFOA

Coefficient of Determination: 0.998814

Calibration curve: $89477.5 * x + 63.0747$

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Sample Report

Page 1

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

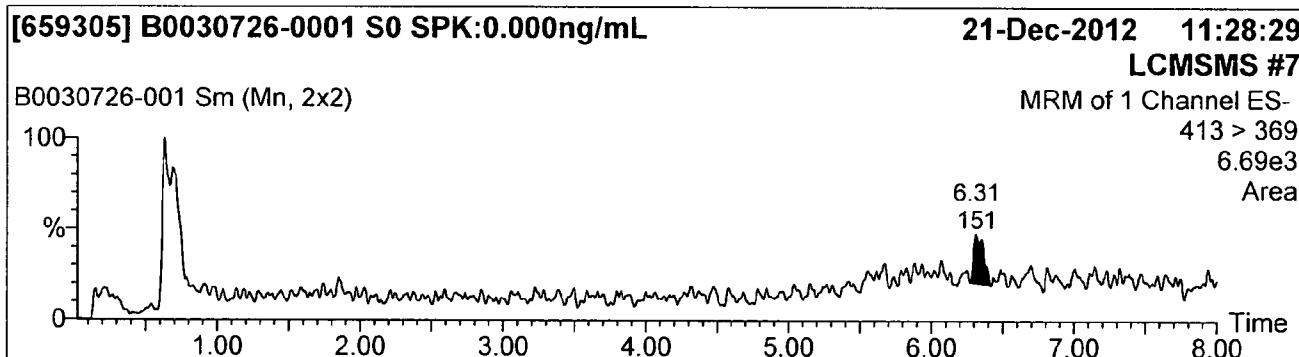
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-001

Text:

1: PFOA



Quantify Sample Report

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Page 2

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-002

Text:

1: PFOA

[659306] B0030726-0002 S1 SPK:0.00500ng/mL

21-Dec-2012 11:44:26

LCMSMS #7

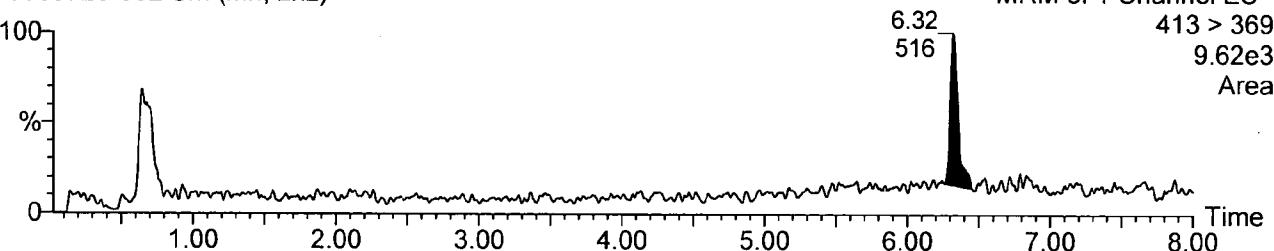
B0030726-002 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

9.62e3

Area



Quantify Sample Report

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Page 3

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

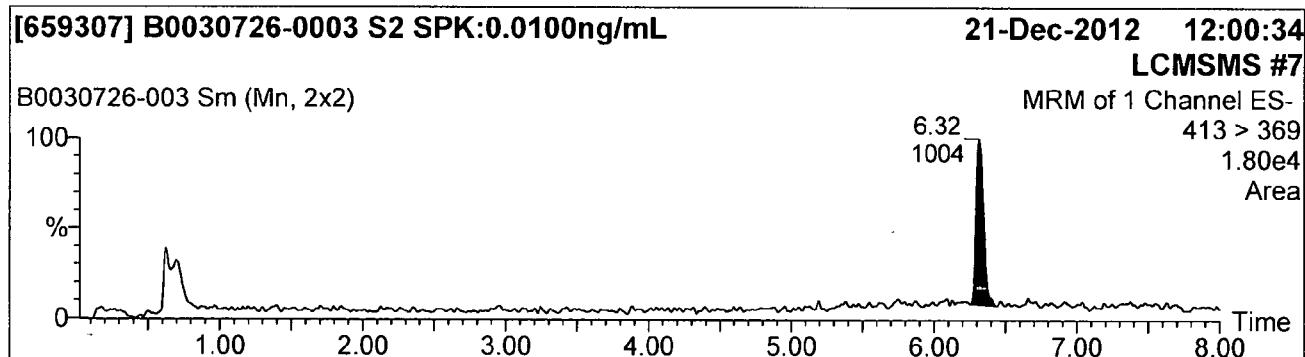
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-003

Text:

1: PFOA



Quantify Sample Report

Page 4

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-004

Text:

1: PFOA

[659308] B0030726-0004 S3 SPK:0.0250ng/mL

21-Dec-2012 12:16:37

LCMSMS #7

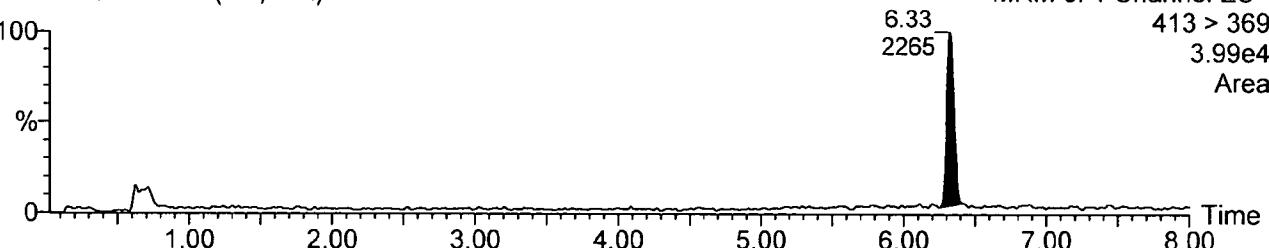
B0030726-004 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

3.99e4

Area



Quantify Sample Report

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Page 5

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112_PFOA

Last modified: Fri Dec 21 12:37:17 2012

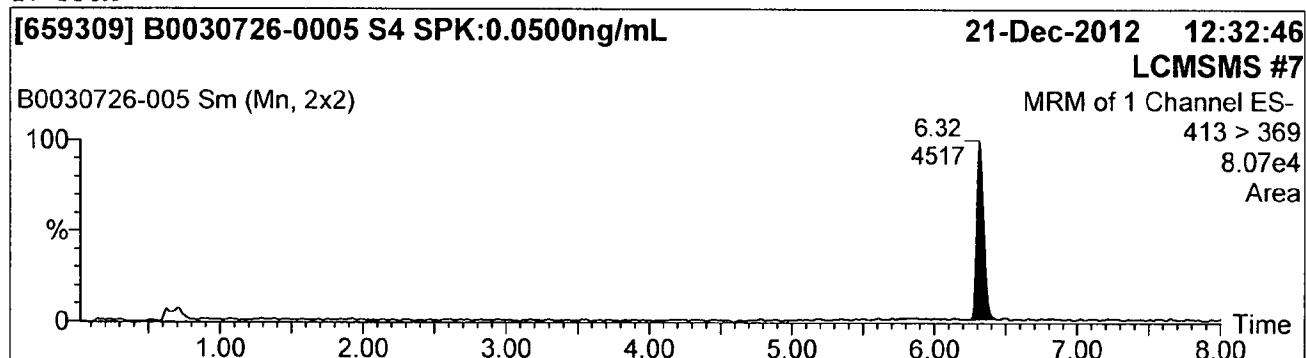
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-005

Text:

1: PFOA



Quantify Sample Report

Page 6

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

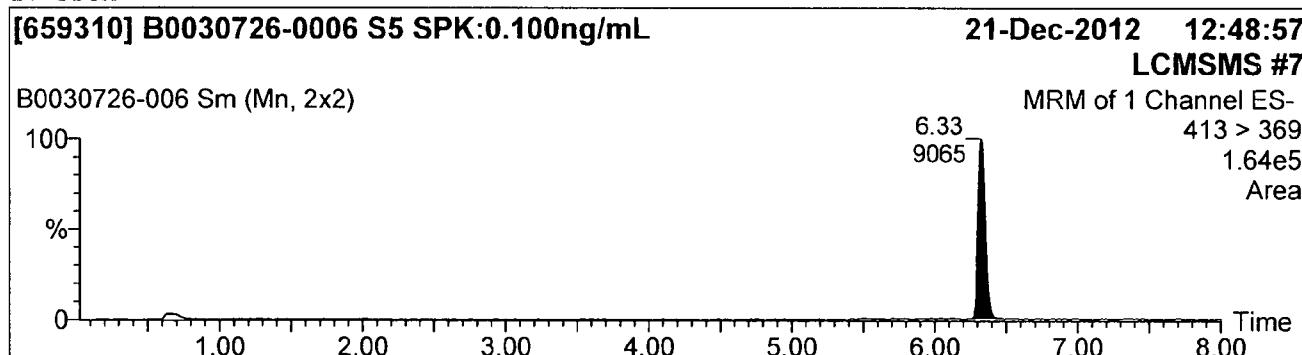
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-006

Text:

1: PFOA



Quantify Sample Report

Page 7

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

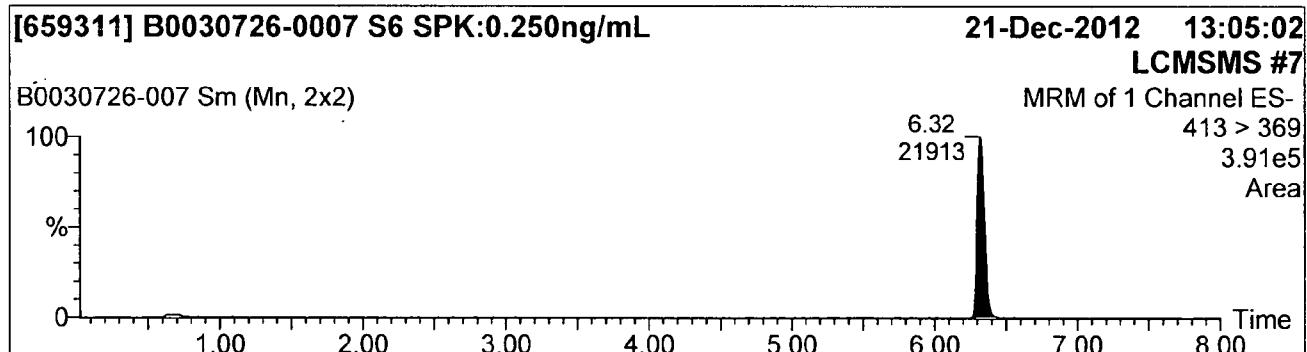
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-007

Text:

1: PFOA



Quantify Sample Report

Page 8

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

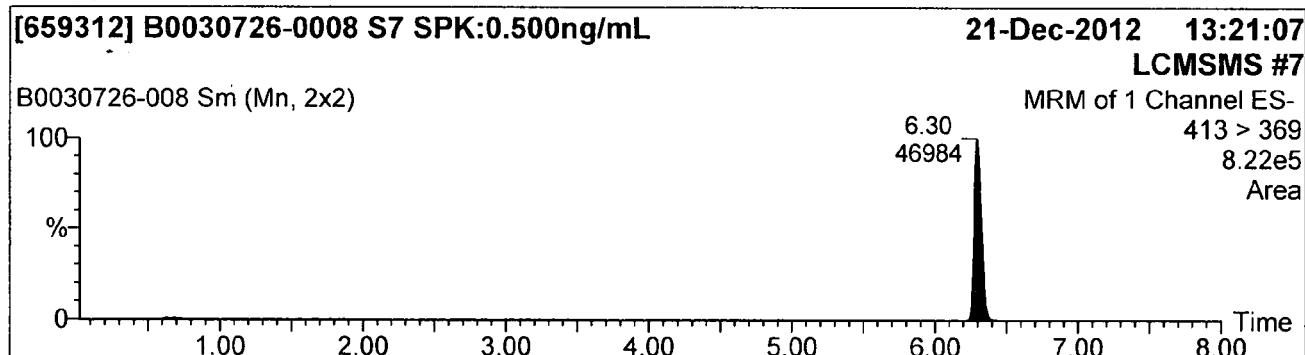
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-008

Text:

1: PFOA



Quantify Sample Report

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Page 9

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

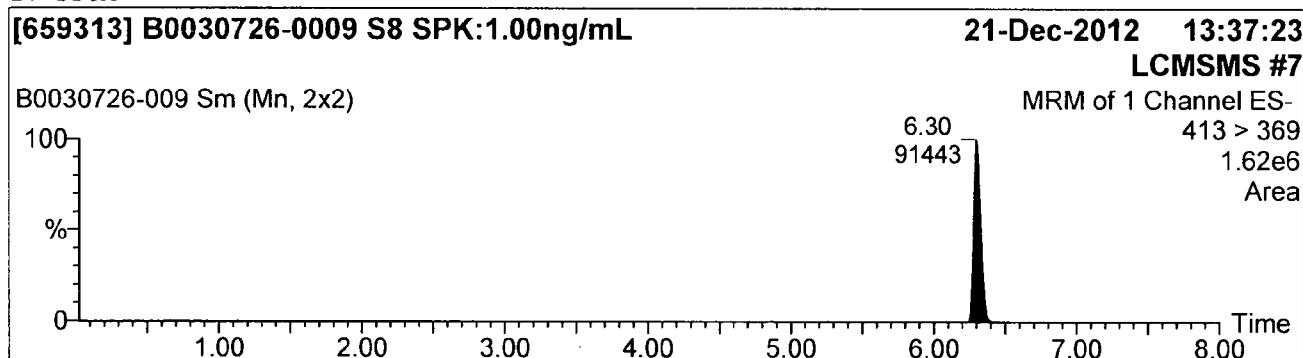
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-009

Text:

1: PFOA



Quantify Sample Report

Page 10

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

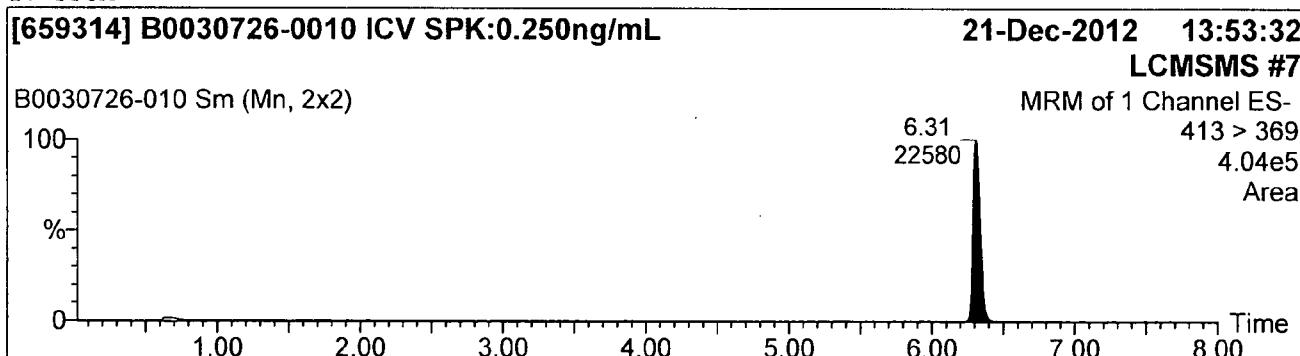
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-010

Text:

1: PFOA



Quantify Sample Report

Page 11

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

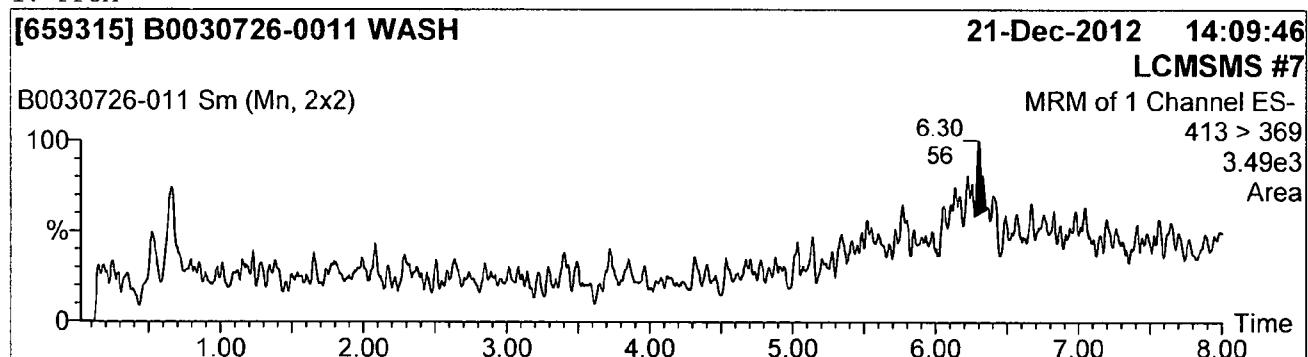
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-011

Text:

1: PFOA



Quantify Sample Report

Page 12

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

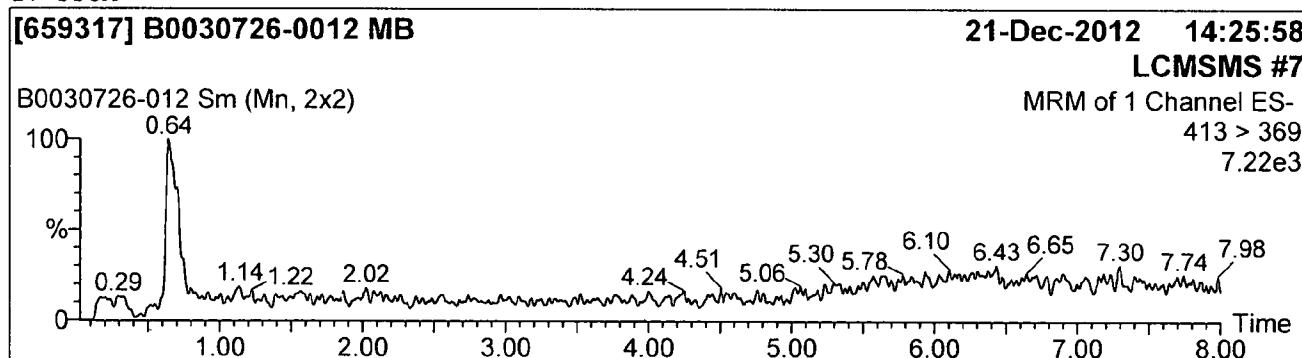
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-012

Text:

1: PFOA



Quantify Sample Report

Page 13

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

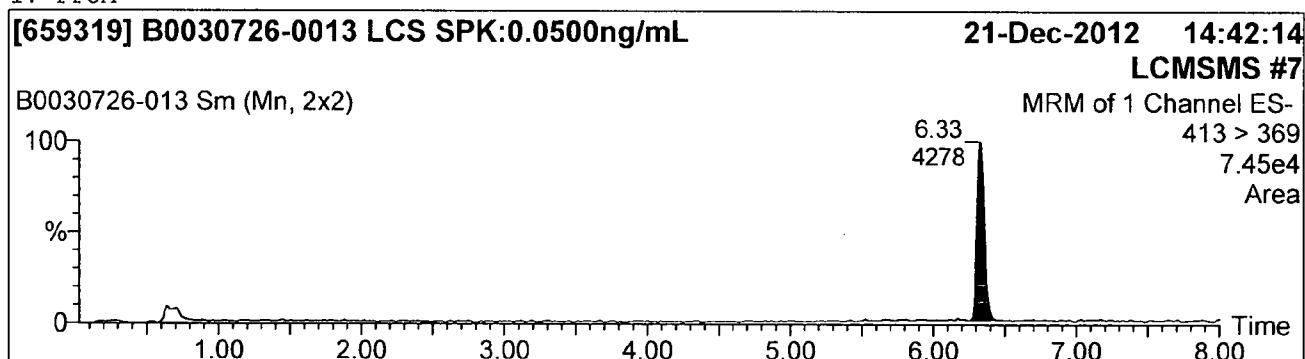
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-013

Text:

1: PFOA



Quantify Sample Report

Page 14

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

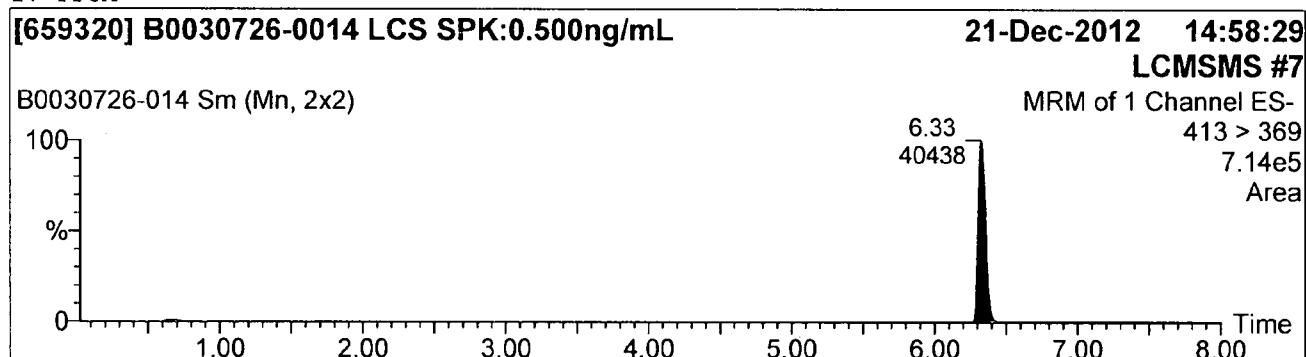
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-014

Text:

1: PFOA



Quantify Sample Report

Page 15

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

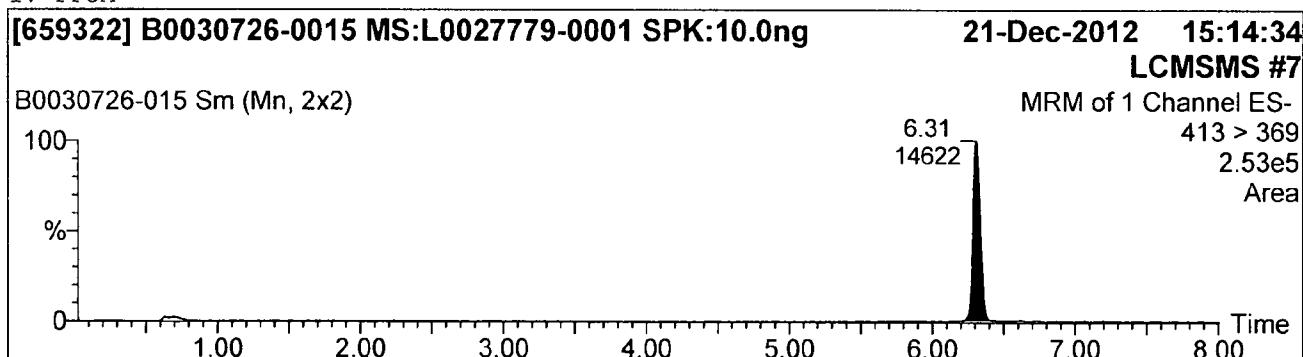
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-015

Text:

1: PFOA



Quantify Sample Report

Page 16

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

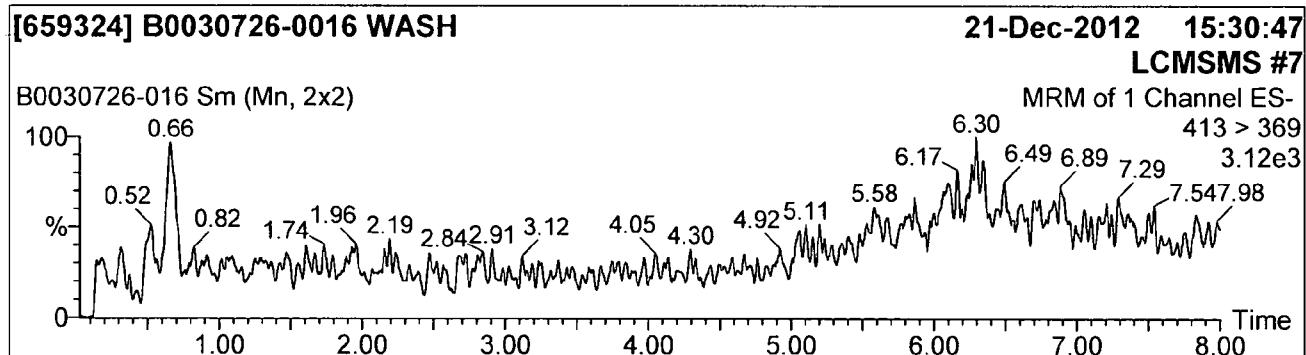
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-016

Text:

l: PFOA



Quantify Sample Report

Page 17

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

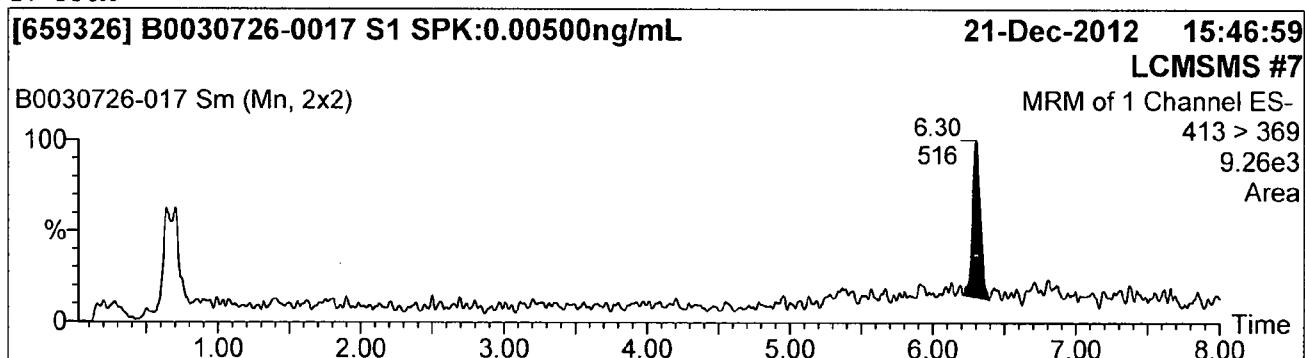
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-017

Text:

1: PFOA



Quantify Sample Report

Page 18

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

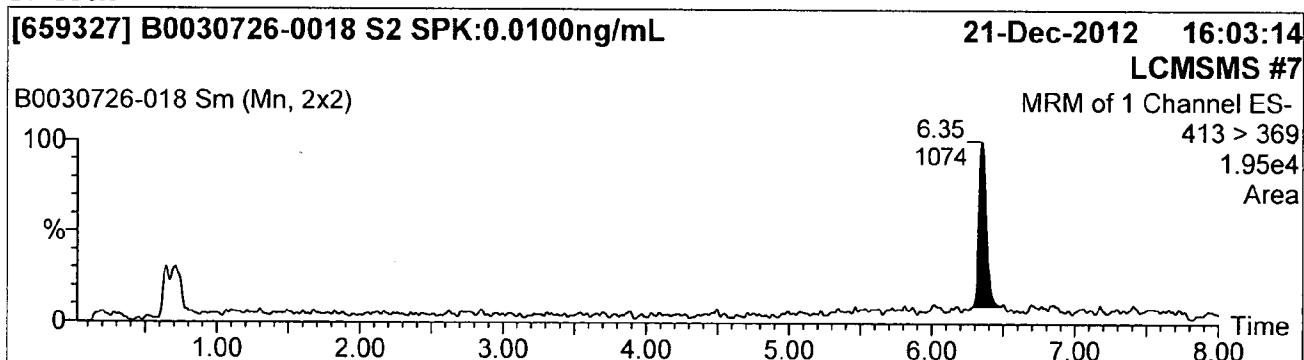
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-018

Text:

1: PFOA



Quantify Sample Report

Page 19

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

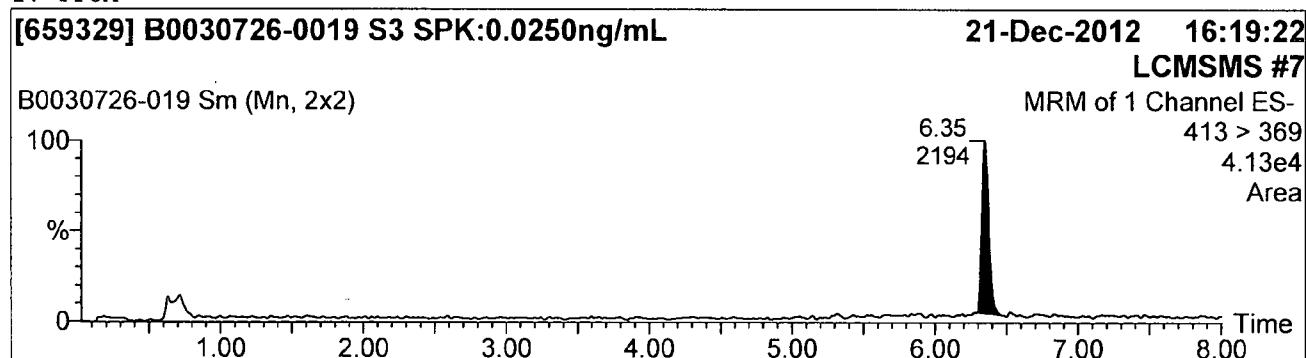
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-019

Text:

1: PFOA



Quantify Sample Report

Page 20

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

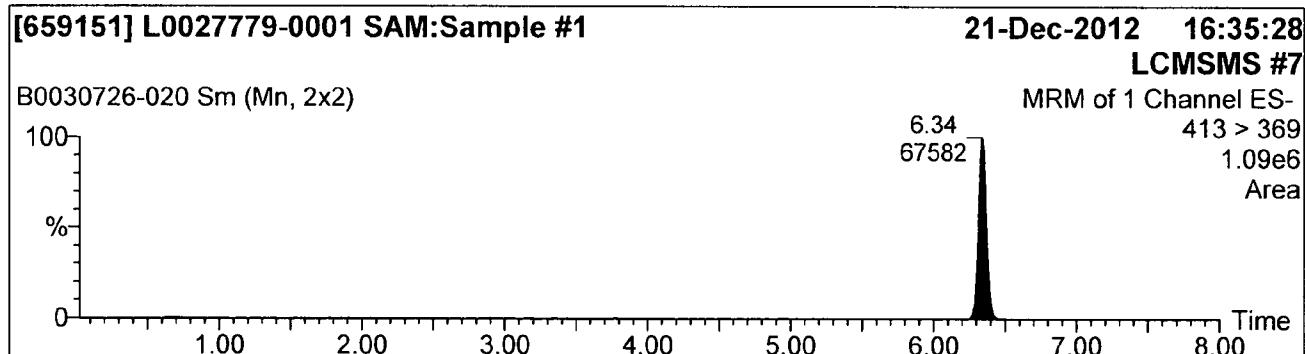
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-020

Text:

1: PFOA



Quantify Sample Report

Page 21

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-022

Text:

1: PFOA

[659331] B0030726-0020 DUP:L0027779-0001

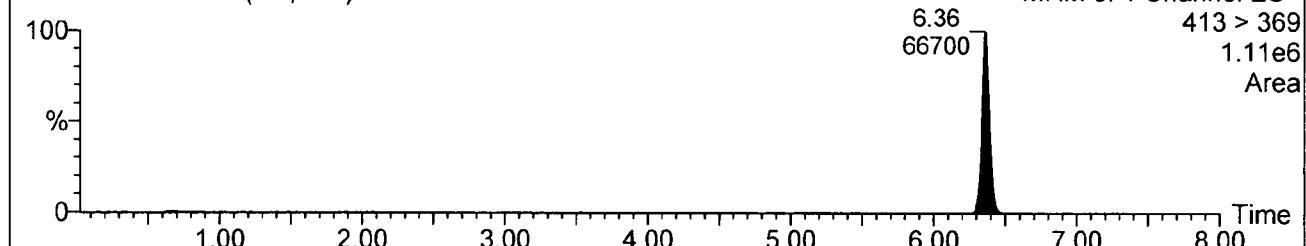
21-Dec-2012 16:51:38

LCMSMS #7

B0030726-022 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369



Quantify Sample Report

Page 22

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

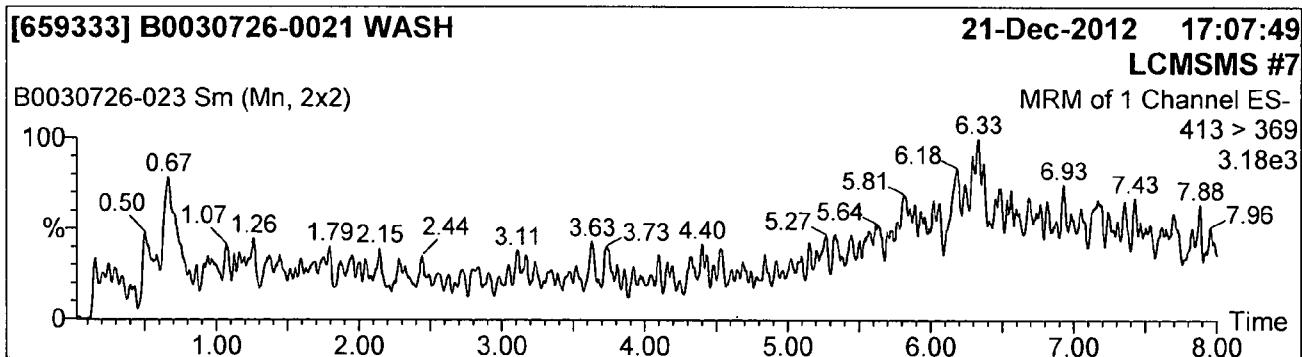
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-023

Text:

1: PFOA



Quantify Sample Report

Page 23

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-024

Text:

1: PFOA

[659334] B0030726-0022 S4 SPK:0.0500ng/mL

21-Dec-2012 17:24:06

LCMSMS #7

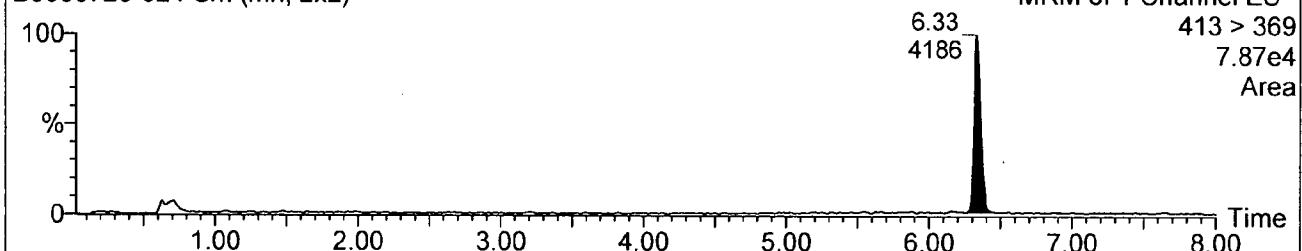
B0030726-024 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

7.87e4

Area



Quantify Sample Report

Page 24

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

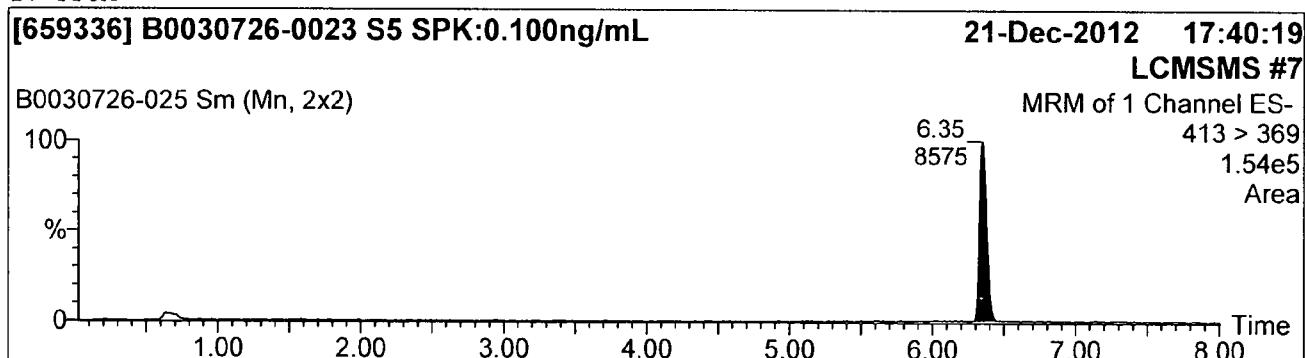
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-025

Text:

1: PFOA



Quantify Sample Report

Page 25

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

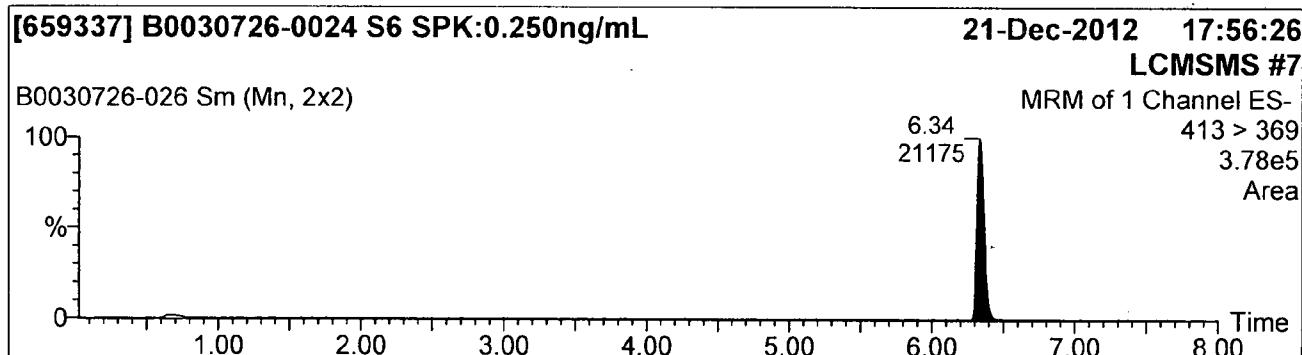
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-026

Text:

1: PFOA



Quantify Sample Report

Page 26

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

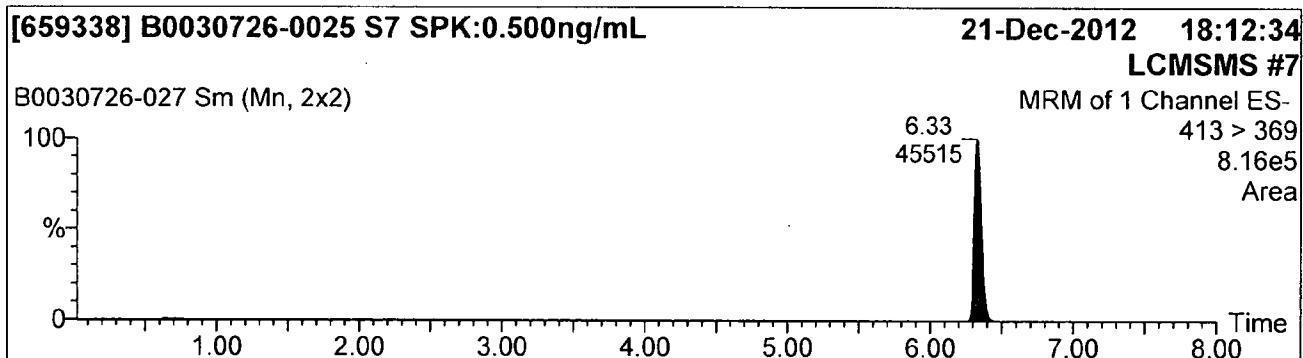
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-027

Text:

1: PFOA



Quantify Sample Report

Page 27

Study No: L27779 Set No: B0030726 Ext.Date: 12/20/12, Analyst: G. Oden

Sample List: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\SampleDB\B0030726

Last modified: Thu Dec 20 16:20:00 2012

Method: M:\Pharma\Data\LCMSMS7\Masslynx\008 APFO 2.PRO\MethDB\083112 PFOA

Last modified: Fri Dec 21 12:37:17 2012

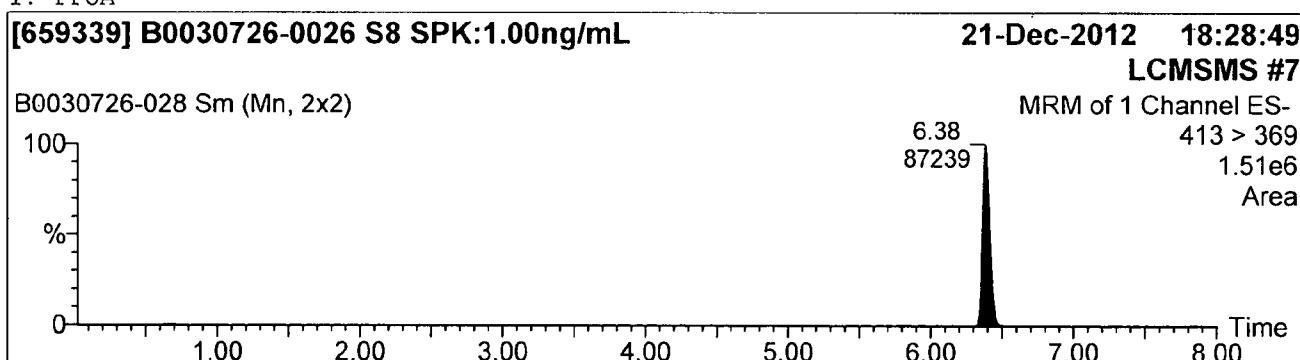
Job Code:

Printed: Fri Dec 28 14:18:25 2012

Name: B0030726-028

Text:

1: PFOA





B0030671

Mattawan (Corporate Headquarters)
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State College
3058 Research Drive
State College, PA 16801
(814) 272-1039 Phone
(814) 231-1580 Fax

Standard Information

Standard: SK0151239
Category: --
Sample Type: RS1
Batch Stage: Preparation
Description: RS1
Text ID: B0030671-0013
Preparation: --

Solvent: --
Quantity: --
Date Prepared: 12/14/2012 11:24:41AM
Date Expires: 12/27/2012 11:59:00PM
Storage Condition: --

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
PFOA (TRIAL)	2.00002 ng	SS0045567 - Pentadecafluoroctanoic Acid (PFOA) in Methanol (0.01 ug/mL)	0.2 mL	0.0100001 µg/mL

Standard Information

Standard: SK0151240
Category: --
Sample Type: RS2
Batch Stage: Preparation
Description: RS2
Text ID: B0030671-0014
Preparation: --

Solvent: --
Quantity: --
Date Prepared: 12/14/2012 11:25:01AM
Date Expires: 3/11/2013 11:59:00PM
Storage Condition: --

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
PFOA (TRIAL)	20.0002 ng	SS0045566 - Pentadecafluoroctanoic Acid (PFOA) in Methanol (0.1 ug/mL)	0.2 mL	0.100001 µg/mL

B0030671

Standard Information

Standard: SK0151241
 Category: --
 Sample Type: MS
 Batch Stage: Preparation
 Description: MS
 Text ID: B0030671-0015
 Preparation: --

Solvent: --
 Quantity: --
 Date Prepared: 12/14/2012 11:25:10AM
 Date Expires: 3/11/2013 11:59:00PM
 Storage Condition: --

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
PFOA (TRIAL)	20.0002 ng	SS0045566 - Pentadecafluoroctanoic Acid (PFOA) in Methanol (0.1 ug/mL)	0.2 mL	0.100001 µg/mL

Standard Information

Standard: SK0151242
 Category: --
 Sample Type: MS
 Batch Stage: Preparation
 Description: MS
 Text ID: B0030671-0028
 Preparation: --

Solvent: --
 Quantity: --
 Date Prepared: 12/14/2012 11:25:22AM
 Date Expires: 3/11/2013 11:59:00PM
 Storage Condition: --

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
PFOA (TRIAL)	20.0002 ng	SS0045566 - Pentadecafluoroctanoic Acid (PFOA) in Methanol (0.1 ug/mL)	0.2 mL	0.100001 µg/mL

Standard Information

Standard: SS0045583
 Category: Calibration
 Sample Type: S0
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.0 ng/mL
 Text ID: B0030671-0001
 Preparation: No spiking solution was added to 40mL of hypercarb water.
 Mixed by inversion.

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) tC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			

Standard Information

Standard: SS0045584
 Category: Calibration
 Sample Type: S1
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.0050 ng/mL
 Text ID: B0030671-0002
 Preparation: Added 20 μ L of SS44903 to 40mL of hypercarb water.
 Mixed by inversion.

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA) PFOA (TRIAL)	0.00500005 ng/mL 0.00500005 ng/mL	SS0045567 - Pentadecafluoroctanoic Acid (PFOA) in Methanol (0.01 μ g/mL)	20 μ L	0.0100001 μ g/mL
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) tC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.11				

Standard Information

Standard: SS0045585
 Category: Calibration
 Sample Type: S2
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.010 ng/mL
 Text ID: B0030671-0003
 Preparation: Added 40 uL of SS45567 to 40mL of hypercarb water.
 Mixed by inversion.

Solvent: Water
 Quantity: 40 mL
 Date Prepared: 12/11/2012 9:39:22AM
 Date Expires: 12/25/2012 11:59:00PM
 Storage Condition: Refrigerated - with Standards

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA)	0.0100001 ng/mL			
PFOA (TRIAL)	0.0100001 ng/mL			
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 5cc (1g) IC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12		SS0045567 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.01 ug/mL)	40 uL	0.0100001 µg/mL

Standard Information

Standard: SS0045586
 Category: Calibration
 Sample Type: S3
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.0250 ng/mL
 Text ID: B0030671-0004
 Preparation: Added 100 μ L of SS45567 to 40mL of hypercarb water.
 Mixed by inversion.

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA) PFOA (TRIAL)	0.0250002 ng/mL 0.0250002 ng/mL	SS0045567 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.01 μ g/mL)	100 μ L	0.0100001 μ g/mL
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) IC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12				

Standard Information

Standard: SS0045587
 Category: Calibration
 Sample Type: S4
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.0500 ng/mL
 Text ID: B0030671-0005
 Preparation: Added 200 μ L of SS45567 to 40mL of hypercarb water.
 Mixed by inversion.

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA) PFOA (TRIAL)	0.0500005 ng/mL 0.0500005 ng/mL	SS0045567 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.01 μ g/mL)	200 μ L	0.0100001 μ g/mL
Material: MA0074109 / 50 mL Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 mL High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) tC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12				

Standard Information

Standard: SS0045588
 Category: Calibration
 Sample Type: S5
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.100 ng/mL
 Text ID: B0030671-0006
 Preparation: Added 400 μ L of SS45567 to 40mL of hypercarb water.
 Mixed by inversion.

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA) PFOA (TRIAL)	0.100001 ng/mL 0.100001 ng/mL	SS0045567 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.01 μ g/mL)	400 μ L	0.0100001 μ g/mL
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) tC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12				

Standard Information

Standard: SS0045589
 Category: Calibration
 Sample Type: S6
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.250 ng/mL
 Text ID: B0030671-0007
 Preparation: Added 100 uL of SS45566 to 40mL of hypercarb water.
 Mixed by inversion.

Solvent: Water
 Quantity: 40 mL
 Date Prepared: 12/11/2012 9:54:43AM
 Date Expires: 12/25/2012 11:59:00PM
 Storage Condition: Refrigerated - with Standards

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA)	0.250002 ng/mL			
PFOA (TRIAL)	0.250002 ng/mL			
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) tC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12		SS0045566 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.1 ug/mL)	100 μL	0.100001 μg/mL

Standard Information

Standard: SS0045590
 Category: Calibration
 Sample Type: S7
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.500 ng/mL
 Text ID: B0030671-0008
 Preparation: Added 200 μ L of SS45566 to 40mL of hypercarb water.
 Mixed by inversion.

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA)	0.500005 ng/mL			
PFOA (TRIAL)	0.500005 ng/mL			
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) tC18	1 mL			
Solution: SL0064243 / Hypercarb filler Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12		SS0045566 - Pentadecafluoroctanoic Acid (PFOA) in Methanol (0.1 ug/mL)	200 μ L	0.100001 μ g/mL

Standard Information

Standard: SS0045591
 Category: Calibration
 Sample Type: S8
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 1.000 ng/mL
 Text ID: B0030671-0009
 Preparation: Added 400 μ L of SS45566 to 40mL of hypercarb water.
 Mixed by inversion.

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA)	1.00001 ng/mL			
PFOA (TRIAL)	1.00001 ng/mL			
Material: MA0074109 / 50 mL Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 mL High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) tC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12		SS0045566 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.1 μ g/mL)	400 μ L	0.100001 μ g/mL

Standard Information

Standard: SS0045592
 Category: Calibration
 Sample Type: ICV
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.250 ng/mL (ICV)
 Text ID: B0030671-0010
 Preparation: Added 100 uL of SS45569 to 40mL of hypercarb water.
 Mixed by inversion.

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluoroctanoic acid (C8 Acid-PFOA)	0.25 ng/mL			
PFOA (TRIAL)	0.25 ng/mL			
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) tC18	1 mL			
Solución: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12		SS0045569 - Pentadecafluoroctanoic Acid (PFOA) in Methanol (0.1 ug/mL) ALT	100 µL	0.1 µg/mL

B0030726

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(814) 231-1580 Fax

Standard Information

Standard:	SK0151285	Solvent:	--
Category:	--	Quantity:	--
Sample Type:	RS1	Date Prepared:	12/20/2012 1:16:05PM
Batch Stage:	Preparation	Date Expires:	3/11/2013 11:59:00PM
Description:	RS1	Storage Condition:	--
Text ID:	B0030726-0013		
Preparation:	--		

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
PFOA (TRIAL)	2.00002 ng	SS0045567 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.01 ug/mL)	0.2 mL	0.0100001 µg/mL

Standard Information

Standard:	SK0151286	Solvent:	--
Category:	--	Quantity:	--
Sample Type:	RS2	Date Prepared:	12/20/2012 1:16:59PM
Batch Stage:	Preparation	Date Expires:	3/11/2013 11:59:00PM
Description:	RS2	Storage Condition:	--
Text ID:	B0030726-0014		
Preparation:	--		

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
PFOA (TRIAL)	20.0002 ng	SS0045566 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.1 ug/mL)	0.2 mL	0.100001 µg/mL

Standard Information

Standard: SK0151287
 Category: --
 Sample Type: MS
 Batch Stage: Preparation
 Description: MS
 Text ID: B0030726-0015
 Preparation: --

Solvent: --
 Quantity: --
 Date Prepared: 12/20/2012 1:17:29PM
 Date Expires: 3/11/2013 11:59:00PM
 Storage Condition: --

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
PFOA (TRIAL)	400.004 ng	SS0045565 - Pentadecafluoroctanoic Acid (PFOA) in Methanol (1.0 ug/mL)	0.4 mL	1.00001 µg/mL

Standard Information

Standard: SS0045583
 Category: Calibration
 Sample Type: S0
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.0 ng/mL
 Text ID: B0030726-0001
 Preparation: No spiking solution was added to 40mL of hypercarb water.
 Mixed by inversion.

Solvent: Water
 Quantity: 40 mL
 Date Prepared: 12/11/2012 9:32:33AM
 Date Expires: 12/25/2012 11:59:46PM
 Storage Condition: Refrigerated - with Standards

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) tC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			

Standard Information

Standard: SS0045584
 Category: Calibration
 Sample Type: S1
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.0050 ng/mL
 Text ID: B0030726-0002
 Preparation: Added 20 μ L of SS44903 to 40mL of hypercarb water.
 Mixed by inversion.

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA)	0.00500005 ng/mL			
PFOA (TRIAL)	0.00500005 ng/mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL	SS0045567 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.01 ug/mL)	20 μ L	0.0100001 μ g/mL
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) IC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.11				

Standard Information

Standard: SS0045585
 Category: Calibration
 Sample Type: S2
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.010 ng/mL
 Text ID: B0030726-0003
 Preparation: Added 40 μ L of SS45567 to 40mL of hypercarb water.
 Mixed by inversion.

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA)	0.0100001 ng/mL			
PFOA (TRIAL)	0.0100001 ng/mL			
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) tC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12		SS0045567 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.01 ug/mL)	40 μ L	0.0100001 μ g/mL

Standard Information

Standard: SS0045586
 Category: Calibration
 Sample Type: S3
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.0250 ng/mL
 Text ID: B0030726-0004
 Preparation: Added 100 uL of SS45567 to 40mL of hypercarb water.
 Mixed by inversion.

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA)	0.0250002 ng/mL			
PFOA (TRIAL)	0.0250002 ng/mL			
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 5cc (1g) IC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12		SS0045567 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.01 ug/mL)	100 μL	0.0100001 μg/mL

Standard Information

Standard: SS0045587
 Category: Calibration
 Sample Type: S4
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.0500 ng/mL
 Text ID: B0030726-0005
 Preparation: Added 200 uL of SS45567 to 40mL of hypercarb water.
 Mixed by inversion.

Solvent: Water
 Quantity: 40 mL
 Date Prepared: 12/11/2012 9:51:28AM
 Date Expires: 12/25/2012 11:59:00PM
 Storage Condition: Refrigerated - with Standards

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA)	0.0500005 ng/mL			
PFOA (TRIAL)	0.0500005 ng/mL			
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) IC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12		SS0045567 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.01 ug/mL)	200 μL	0.0100001 μg/mL

Standard Information

Standard: SS0045588
 Category: Calibration
 Sample Type: S5
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.100 ng/mL
 Text ID: B0030726-0006
 Preparation: Added 400 uL of SS45567 to 40mL of hypercarb water.
 Mixed by inversion.

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Prepared From</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA) PFOA (TRIAL)	0.100001 ng/mL 0.100001 ng/mL	SS0045567 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.01 ug/mL)	400 uL	0.0100001 µg/mL
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) IC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12				

Standard Information

Standard: SS0045589
 Category: Calibration
 Sample Type: S6
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.250 ng/mL
 Text ID: B0030726-0007
 Preparation: Added 100 uL of SS45566 to 40mL of hypercarb water.
 Mixed by inversion.

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA) PFOA (TRIAL)	0.250002 ng/mL 0.250002 ng/mL	SS0045566 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.1 ug/mL)	100 μL	0.100001 μg/mL
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) IC18	1 mL			
Solution: SL0084243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12				

Standard Information

Standard: SS0045590
 Category: Calibration
 Sample Type: S7
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.500 ng/mL
 Text ID: B0030726-0008
 Preparation: Added 200 uL of SS45566 to 40mL of hypercarb water.
 Mixed by inversion.

Solvent: Water
 Quantity: 40 mL
 Date Prepared: 12/11/2012 9:57:16AM
 Date Expires: 12/25/2012 11:59:00PM
 Storage Condition: Refrigerated - with Standards

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA) PFOA (TRIAL)	0.500005 ng/mL 0.500005 ng/mL	SS0045566 - Pentadecafluoroctanoic Acid (PFOA) in Methanol (0.1 ug/mL)	200 μL	0.100001 μg/mL
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) IC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12				

Standard Information

Standard: SS0045591
 Category: Calibration
 Sample Type: S8
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 1.000 ng/mL
 Text ID: B0030726-0009
 Preparation: Added 400 μ L of SS45566 to 40mL of hypercarb water.
 Mixed by inversion.

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA)	1.00001 ng/mL			
PFOA (TRIAL)	1.00001 ng/mL			
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) tC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12		SS0045566 - Pentadecafluoroctanoic Acid (PFOA) in Methanol (0.1 μ g/mL)	400 μ L	0.100001 μ g/mL

Standard Information

Standard: SS0045592
 Category: Calibration
 Sample Type: ICV
 Batch Stage: Analysis
 Description: PFOA Extracted Calibration Standard 0.250 ng/mL (ICV)
 Text ID: B0030726-0010
 Preparation: Added 100 μ L of SS45569 to 40mL of hypercarb water.
 Mixed by inversion.

Solvent: Water
 Quantity: 40 mL
 Date Prepared: 12/11/2012 10:00:48AM
 Date Expires: 12/25/2012 11:59:00PM
 Storage Condition: Refrigerated - with Standards

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>	<u>Concentration</u>
Perfluorooctanoic acid (C8 Acid-PFOA)	0.25 ng/mL			
PFOA (TRIAL)	0.25 ng/mL			
Material: MA0074109 / 50 ml Freestanding Centrifuge Tubes	1 mL			
Material: MA0073610 / 15 ml High Clarity Polypropylene Conical Tube	1 mL			
Material: MA0073918 / Sep-Pak Vac 6cc (1g) tC18	1 mL			
Solution: SL0064243 / Hypercarb filter Water / Date Expires: 03/04/2013	40 mL			
Instrument: IN0008104 / PIP-141 / Date of Use: 2012.12.12		SS0045569 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.1 μ g/mL) ALT	100 μ L	0.1 μ g/mL

Secondary Standard

Standard Information

Standard:	SS0045569	Solvent:	Methanol
Category:	Fortification	Quantity:	100 mL
Description:	Pentadecafluorooctanoic Acid (PFOA) in Methanol (0.1 ug/mL) ALT	Date Prepared:	12/11/2012 8:54:08AM
		Date Expires:	3/11/2013 11:59:00PM
		Storage Condition:	Refrigerated
Preparation:	Dilute 10 mL of the 1.0 ug/mL to a final volume of 100 mL in methanol. Solution was shaken. The solution was transferred into a 125 mL Nalgene Bottle.		
ICOC:	RECEIVED / BB2-3rd Floor Lab / Dec 11, 2012 8:55:29AM LOGIN / No Location / Dec 11, 2012 8:54:22AM		

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>
Perfluorooctanoic acid (C8 Acid-PFOA)	0.1 µg/mL		
PFOA (TRIAL)	0.1 µg/mL	SS0045568 - Pentadecafluorooctanoic Acid (PFOA) in Methanol (1.0 ug/mL) ALT	10 mL
Reagent: RE0060657 / METHANOL HPLC / Date Expires: 05/30/2014	90 mL		1 µg/mL
Material: MA0060774 / 10mL Serological Disposable Glass Pipet	1 -		
Material: MA0073175 / 125 mL Amber Nalgene HDPE bottles	1 -		

Created On: 12/11/2012 8:54:21AM
 Created By: Rimmey, Amanda

Secondary Standard

Standard Information

Standard:	SS0045568	Solvent:	Methanol
Category:	Fortification	Quantity:	100 mL
Description:	Pentadecafluoroctanoic Acid (PFOA) in Methanol (1.0 ug/mL) ALT	Date Prepared:	12/11/2012 8:51:55AM
		Date Expires:	3/11/2013 11:59:00PM
		Storage Condition:	Refrigerated
Preparation:	Dilute 1.0 mL of the 100 ug/mL to a final volume of 100 mL in methanol. The solution was shaken. The solution was transferred into a 125 mL Nalgene Bottle.		
ICOC:	RECEIVED / BB2-3rd Floor Lab / Dec 11, 2012 8:53:26AM LOGIN / No Location / Dec 11, 2012 8:51:54AM		

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>
Perfluoroctanoic acid (C8 Acid-PFOA)	1 µg/mL		
PFOA (TRIAL)	1 µg/mL		
		SS0045561 - Pentadecafluoroctanoic Acid (PFOA) in Methanol 100 ug/mL (ALT)	
Reagent: RE0060657 / METHANOL HPLC / Date Expires: 05/30/2014	99 mL		1 mL
Material: MA0060774 / 10mL Serological Disposable Glass Pipet	1 -		100 µg/mL
Material: MA0073175 / 125 mL Amber Nalgene HDPE bottles	1 -		

Created On: 12/11/2012 8:51:54AM
 Created By: Rimmey, Amanda

Secondary Standard

Standard Information

Standard: SS0045567 Solvent: Methanol
 Category: Fortification Quantity: 100 mL
 Description: Pentadecafluoroctanoic Acid (PFOA) in Methanol (0.01 ug/mL) Date Prepared: 12/11/2012 8:49:33AM
 Preparation: Dilute 10 mL of the 0.1 ug/mL to a final volume of 100 mL in methanol. The solution was shaken.
 The solution was transferred into a 125 mL Nalgene Bottle. Date Expires: 3/11/2013 11:59:00PM
 Storage Condition: Refrigerated
 ICOC: RECEIVED / BB2-3rd Floor Lab / Dec 11, 2012 8:50:53AM
 LOGIN / No Location / Dec 11, 2012 8:49:33AM

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>
Perfluorooctanoic acid (C8 Acid-PFOA)	0.0100001 µg/mL		
PFOA (TRIAL)	0.0100001 µg/mL		
Reagent: RE0060657 / METHANOL HPLC / Date Expires: 05/30/2014	90 mL	SS0045566 - Pentadecafluoroctanoic Acid (PFOA) in Methanol (0.1 ug/mL)	10 mL
Material: MA0060774 / 10mL Serological Disposable Glass Pipet	1 -		
Material: MA0073175 / 125 mL Amber Nalgene HDPE bottles	1 -		

Created On: 12/11/2012 8:49:33AM
 Created By: Rimmey, Amanda

Secondary Standard

Standard Information

Standard:	SS0045566	Solvent:	Methanol
Category:	Fortification	Quantity:	100 mL
Description:	Pentadecafluoroctanoic Acid (PFOA) in Methanol (0.1 ug/mL)	Date Prepared:	12/11/2012 8:47:38AM
		Date Expires:	3/11/2013 11:59:00PM
		Storage Condition:	Refrigerated
Preparation:	Dilute 10 mL of the 1.0 ug/mL to a final volume of 100 mL in methanol. The solution was shaken. The solution was transferred into a 125 mL Nalgene Bottle.		
ICOC:	RECEIVED / BB2-3rd Floor Lab / Dec 11, 2012 8:49:11AM LOGIN / No Location / Dec 11, 2012 8:47:39AM		

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>
Perfluoroctanoic acid (C8 Acid-PFOA) PFOA (TRIAL)	0.100001 µg/mL 0.100001 µg/mL	SS0045565 - Pentadecafluoroctanoic Acid (PFOA) in Methanol (1.0 ug/mL)	10 mL
Reagent: RE0060657 / METHANOL HPLC / Date Expires: 05/30/2014	90 mL		1.00001 µg/mL
Material: MA0060774 / 10mL Serological Disposable Glass Pipet	1 -		
Material: MA0073175 / 125 mL Amber Nalgene HDPE bottles	1 -		
Instrument: IN0008050 / PIP-128 / Date of Use: 2012.12.11			

Created On: 12/11/2012 8:47:37AM
 Created By: Rimmey, Amanda

Secondary Standard

Standard Information

Standard:	SS0045565	Solvent:	Methanol
Category:	Fortification	Quantity:	100 mL
Description:	Pentadecafluoroctanoic Acid (PFOA) in Methanol (1.0 ug/mL)	Date Prepared:	12/11/2012 8:45:39AM
		Date Expires:	3/11/2013 11:59:00PM
		Storage Condition:	Refrigerated
Preparation:	Dilute 10 mL of the 10 ug/mL to a final volume of 100 mL in methanol. The solution was shaken. The solution was transferred into a 125 mL Nalgene Bottle.		
ICOC:	RECEIVED / BB2-3rd Floor Lab / Dec 11, 2012 8:47:14AM LOGIN / No Location / Dec 11, 2012 8:45:39AM		

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>
Perfluoroctanoic acid (C8 Acid-PFOA) PFOA (TRIAL)	1.00001 µg/mL 1.00001 µg/mL	SS0045564 - Pentadecafluoroctanoic Acid (PFOA) in Methanol (10 ug/mL)	10 mL
Reagent: RE0062054 / METHANOL HPLC / Date Expires: 09/18/2014	90 mL		10.0001 µg/mL
Material: MA0060774 / 10mL Serological Disposable Glass Pipet	1 -		
Material: MA0073175 / 125 mL Amber Nalgene HDPE bottles	1 -		

Created On: 12/11/2012 8:45:38AM
 Created By: Rimmey, Amanda

Secondary Standard

Standard Information

Standard:	SS0045564	Solvent:	Methanol
Category:	Fortification	Quantity:	100 mL
Description:	Pentadecafluoroctanoic Acid (PFOA) in Methanol (10 ug/mL)	Date Prepared:	12/11/2012 8:43:54AM
Preparation:	Dilute 10 mL of the 100 ug/mL to a final volume of 100 mL in methanol. The solution was shaken. The solution was transferred into a 125 mL Nalgene Bottle.	Date Expires:	3/11/2013 11:59:00PM
ICOC:	RECEIVED / BB2-3rd Floor Lab / Dec 11, 2012 8:45:17AM LOGIN / No Location / Dec 11, 2012 8:43:56AM	Storage Condition:	Refrigerated

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>
Perfluoroctanoic acid (C8 Acid-PFOA) PFOA (TRIAL)	10.0001 µg/mL 10.0001 µg/mL	SS0045563 - Pentadecafluoroctanoic Acid (PFOA) in Methanol (100 ug/mL)	10 mL
Reagent: RE0062054 / METHANOL HPLC / Date Expires: 09/18/2014	90 mL		100.001 µg/mL
Material: MA0060774 / 10mL Serological Disposable Glass Pipet	10 mL		
Material: MA0069936 / 125mL Amber Narrow-Mouth Bottle, HDPE	125 mL		

Created On: 12/11/2012 8:43:53AM
 Created By: Rimmey, Amanda



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Secondary Standard

Standard Information

Standard: SS0045563 Solvent: Methanol
Category: Fortification Quantity: 100 mL
Description: Pentadecafluoroctanoic Acid (PFOA) in Methanol (100 ug/mL) Date Prepared: 12/11/2012 8:38:42AM
Date Expires: 3/11/2013 11:59:00PM
Storage Condition: Refrigerated

Preparation: Dilute 10 mL of the 1000 ug/mL to a final volume of 100 mL in methanol. Added an additional 7.8uL of the 1000ug/mL standard. The solution was shaken.

The solution was transferred into a 125 mL Nalgene Bottle.

ICOC: RECEIVED / BB2-3rd Floor Lab / Dec 11, 2012 8:42:18AM
LOGIN / No Location / Dec 11, 2012 8:38:46AM

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>
Perfluoroctanoic acid (C8 Acid-PFOA)	100.001 µg/mL		
PFOA (TRIAL)	100.001 µg/mL		
Reagent: RE0060657 / METHANOL HPLC / Date Expires: 05/30/2014	90 mL	SS0045562 - Pentadecafluoroctanoic Acid (PFOA) in Methanol (1000 ug/mL)	10 mL
Material: MA0060774 / 10mL Serological Disposable Glass Pipet	1 -		
Material: MA0073175 / 125 mL Amber Nalgene HDPE bottles	1 -		

Created On: 12/11/2012 8:38:43AM
Created By: Rimmey, Amanda



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Secondary Standard

Standard Information

Standard: SS0045562 Solvent: Methanol
Category: Stock Quantity: 100.012 mL
Description: Pentadecafluoroctanoic Acid (PFOA) in Methanol (1000 ug/mL) Date Prepared: 12/11/2012 8:11:26AM
Storage Condition: Refrigerated
Preparation: Dissolve 0.100100 grams of PFOA in 100 mL of Methanol in a 100 mL Class A volumetric Flask. Added 12uL methanol to the flask. The solution was mixed by inversion.
The solution was then transferred to a 125mL Plastic bottle.
ICOC: RECEIVED / BB2-3rd Floor Lab / Dec 11, 2012 8:18:39AM
LOGIN / No Location / Dec 11, 2012 8:11:26AM

Component Concentrations

Component	Concentration / Amount	Standard / Description	Aliquot	
Perfluoroctanoic acid (C8 Acid-PFOA)	1000.01 µg/mL			
PFOA (TRIAL)	1000.01 µg/mL			
Reagent: RE0060657 / METHANOL HPLC / Date Expires: 05/30/2014	100.012 mL	SP0010373 - Perfluoroctanoic Acid (PFOA)	100.113 mg	99.9 %
Material: MA0073175 / 125 mL Amber Nalgene HDPE bottles	1 mL			
Instrument: IN0000809 / BAL-32 / Date of Use: 2012.12.11				

Created On: 12/11/2012 8:11:25AM
Created By: Rimmey, Amanda

Secondary Standard

Standard Information

Standard:	SS0045561	Solvent:	Methanol
Category:	Stock	Quantity:	100.346 mL
Description:	Pentadecafluoroctanoic Acid (PFOA) in Methanol 100 ug/mL (ALT)	Date Prepared:	12/11/2012 7:47:52AM
		Date Expires:	6/11/2013 11:59:00PM
		Storage Condition:	Refrigerated
Preparation:	Dissolve 0.0101010 grams of PFOA (SP13558) in 100 mL of Methanol using a class A volumetric flask. 0.346 mL was added to the flask. The solution was mixed by inversion. Then solutions was transferred to a 125mL Plastic Amber Bottle.		
ICOC:	RECEIVED / BB2-3rd Floor Lab / Dec 11, 2012 7:49:30AM LOGIN / No Location / Dec 11, 2012 7:47:53AM		

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>
Perfluoroctanoic acid (C8 Acid-PFOA) PFOA (TRIAL)	100 µg/mL 100 µg/mL	SP0013558 - Perfluoroctanoic Acid	0.010136 g
Reagent: RE0060657 / METHANOL HPLC / Date Expires: 05/30/2014	100.346 mL		99 %
Material: MA0073175 / 125 mL Amber Nalgene HDPE bottles	1 mL		
Instrument: IN0000809 / BAL-32 / Date of Use: 2012.12.11			

Created On: 12/11/2012 7:47:52AM
 Created By: Rimmey, Amanda

Mattawan (Corporate Headquarters)
 54943 North Main Street
 Mattawan, MI 49071-9399
 (269) 668-3336 Phone
 (269) 668-4151 Fax

State College
 3058 Research Drive
 State College, PA 16801
 (814) 272-1039 Phone
 (814) 231-1580 Fax

Secondary Standard

Standard Information

Standard:	SP0013558	Solvent:	None
Category:	--	Quantity:	--
Description:	Perfluorooctanoic Acid	Date Prepared:	--
Preparation:	--		
ICOC:	TRANSFER / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / Dec 11, 2012 8:19:59AM		
	TRANSFER / BB1-105 / IN0000809 / DAL-32 / Dec 11, 2012 7:47:09AM		
	TRANSFER / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / Inventory: 50 / Jul 26, 2012 3:50:18PM		
	TRANSFER / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / Jun 12, 2012 1:22:44PM		
	TRANSFER / BB1-102 / IN0000569 / BAL-27 / Jun 12, 2012 1:16:14PM		
	QUARANTINE / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / Jun 11, 2012 3:24:44PM		
	RECEIVED / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / Jun 11, 2012 3:14:45PM		
	LOGIN / No Location / Jun 11, 2012 3:13:50PM		

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>
Perfluorooctanoic acid (C8 Acid-PFOA)	99 %		
PFOA (TRIAL)	99 %		

Prepared From

Created On: 6/15/2012 9:43:30AM
 Created By: Rosso, Matthew

Certificate of Analysis

Alfa Aesar®
A Johnson Matthey Company

Product No.: L08862

Product: Perfluorooctanoic acid, 95%

Lot No.: L19X053

Appearance White solid

Melting point 58 - 60°C

Assay 99 %

Identity Matches reference

*SP13558 6/11/12
SP13558
6/11/12*

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Email Eurosales@alfa.com

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Fax +44 (0)1524-850608
Email UKsales@alfa.com

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Fax 0800 10 20 67 or
+33 (0)3 8862 6864
Email: frventes@alfa.com

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+91 8008 812525 or
+91 8008 812626
Fax +91 8418 260060
Email: India@alfa.com

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Fax +86 (010) 8567-8601
Email: saleschina@alfa-asia.com
Fax. +82-2-3140-6002
Email: saleskorea@alfa-asia.com

TAC EPA 00299

000290

978-621-8427
ALFA AE9AR

1 LBS

1 OF 1

30 BOND ST
HAVERHILL MA 01835

SHIP ATTN:

TO: 978-621-8300
MPI RESEARCH INC
3040 RESEARCH DR
SC8-001825

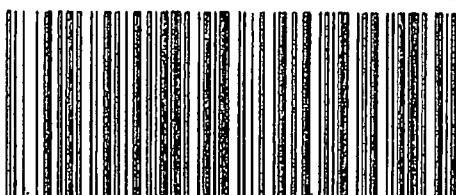
STATE COLLEGE PA 16801-2782

PA 168 0-10



UPS GROUND

TRACKING #: 1Z 015 096 03 1556 9652



BILLING: 3RD PARTY

SP 13558

gpa 6/11/12

Parcel# 1807888

MIT 10R0 ZTZ140XII2 21.5A 10/2011

TAC EPA 00300

000291



A Johnson Matthey Company

30 Bond Street
Ward Hill, MA 01835
EMERGENCY PHONE NUMBER
1-866-928-0789

PAGE : 1
PHONE NUMBER (800) 343-0660
D-U-N-S 61-279-9478
FEDERAL ID NO. 23-2543453

MPI Research Inc

S
H Sc8-001825
I 3048 Research Dr
P State College PA 168012782
USA
T TEL # 800-932-5000
C

120608

CUST# 59010724 JPB

DATE SHIPPED	SHIPPING CHARGES	
SHIPPER	NO. OF PKGS.	GROSS WEIGHT

CUSTOMER ORDER NUMBER	DATE ENTERED	ALFA AESAR ORDER NUMBER	F.O.B. PLANT	PRINT DATE & TIME
4500389207	6/07/12	60560385	WARD HILL	6/07/12 16:29:34
TERMS				
NET 30 DAYS /3RD UPS				
STOCK NUMBER	UNIT OF MEASURE	SHIP QTY	B/O QTY	ORDER QTY
L08862-14 CR-14-05	25g MSDS Y	1		1 UN3261 Perfluorooctanoic acid, 95% CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
L19X053		1		8 III CORROSIVE
IN CASE OF EMERGENCY FOLLOW EMERGENCY GUIDE NUMBER 154				
<p>*** Shipping Instructions ***</p> <p>***VWR***.</p> <p>*** ORDER IS COMPLETE *** THANK YOU FOR YOUR ORDER.</p>				
<p style="text-align: right;"><i>SP 13558</i></p> <p style="text-align: right;"><i>JRS 6/11/12</i></p>				

NOTE TO RECEIVER:
REPORT SHORTAGES OR ERRORS
TO SALES SERVICE DEPARTMENT,
ALFAAESAR. REPORT
DAMAGE OF CONTENTS TO
CARRIER IMMEDIATELY.



TAC-EPA 00301

000292

Mattawan (Corporate Headquarters)
54943 North Main Street
Mattawan, MI 49071-9399
(269) 668-3336 Phone
(269) 668-4151 Fax

State College
3058 Research Drive
State College, PA 16801
(814) 272-1039 Phone
(814) 231-1580 Fax

Secondary Standard

Standard Information

Standard:	SP0010373	Solvent:	None
Category:	--	Quantity:	--
Description:	Perfluorooctanoic Acid (PFOA)	Date Prepared:	--
Preparation:	--	Date Expires:	6/5/2013 12:00:00AM
		Storage Condition:	Ambient Temperature

Secondary Standard

Standard Information

Standard:	SP0010373	Solvent:	None
Category:	--	Quantity:	--
Description:	Perfluorooctanoic Acid (PFOA)	Date Prepared:	--
		Date Expires:	6/5/2013 12:00:00AM
		Storage Condition:	Ambient Temperature

ICOC: TRANSFER / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / Dec 11, 2012 8:19:59AM
TRANSFER / BB1-105 / IN0000809 / BAL-32 / Dec 11, 2012 7:47:12AM
TRANSFER / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / Oct 2, 2012 10:25:07AM
TRANSFER / BB1-105 / IN0000809 / BAL-32 / Oct 2, 2012 9:56:31AM
TRANSFER / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / Inventory: 50 / Jul 26, 2012 3:50:13PM
TRANSFER / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / Jul 2, 2012 9:58:17AM
TRANSFER / BB1-102 / IN0000569 / BAL-27 / Jul 2, 2012 9:42:37AM
TRANSFER / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / Apr 3, 2012 9:03:23AM
TRANSFER / BB1-105 / IN0000285 / BAL-17 / Apr 3, 2012 8:48:21AM
TRANSFER / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / Mar 21, 2012 9:21:38AM
TRANSFER / BB1-105 / IN0000285 / BAL-17 / Mar 21, 2012 8:57:34AM
TRANSFER / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / Jan 5, 2012 11:07:13AM
TRANSFER / BB1-105 / IN0000285 / BAL-17 / Jan 5, 2012 10:38:58AM
TRANSFER / BB1-105 / IN0000809 / BAL-32 / Jan 5, 2012 10:37:57AM
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TRANSFER / BB2-3rd Floor Lab / IN0000297 / BAL-14 / Dec 15, 2011 9:32:14AM
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TRANSFER / BB1-105 / IN0000285 / BAL-17 / Nov 14, 2011 11:06:57AM
TRANSFER / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / Oct 11, 2011 9:49:10AM
TRANSFER / BB1-105 / IN0000285 / BAL-17 / Oct 11, 2011 9:28:12AM
TRANSFER / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / Oct 10, 2011 1:51:11PM
TRANSFER / BB1-105 / IN0000285 / BAL-17 / Oct 10, 2011 12:59:59PM
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TRANSFER / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / Jun 9, 2011 1:31:23PM
TRANSFER / BB1-105 / IN0000285 / BAL-17 / Jun 9, 2011 1:00:40PM
TRANSFER / BB1-105 / IN0000809 / BAL-32 / Jun 9, 2011 10:37:56AM
TRANSFER / BB1-105 / IN0001188 / Shelf A, Room B1-105 / D0004414 / Shelf A6, Room 1-105 / CC0012380 / May 16, 2011 2:14:16PM
TRANSFER / BB1-105 / CC0010058 / Apr 12, 2011 2:02:27PM
TRANSFER / BB1-105 / IN0000809 / BAL-32 / Apr 12, 2011 2:00:33PM
TRANSFER / BB1-105 / CC0010058 / Jan 28, 2011 9:22:39AM
TRANSFER / BB1-105 / IN0000809 / BAL-32 / Jan 28, 2011 8:46:03AM
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QUARANTINE / BB1-105 / IN0000809 / BAL-32 / Oct 21, 2010 10:44:53AM
TRANSFER / BB1-105 / IN0000809 / BAL-32 / Oct 21, 2010 10:02:28AM
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TRANSFER / BB1-105 / CC0010058 / Jul 27, 2010 1:05:41PM
TRANSFER / BB1-105 / IN0000809 / BAL-32 / Jul 27, 2010 12:34:19PM
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TRANSFER / BB1-105 / CC0001167 / Inventory: 44 / Jul 3, 2010 10:20:30AM
TRANSFER / BB1-105 / CC0001167 / Jun 8, 2010 3:06:16PM
TRANSFER / BB1-105 / IN0000809 / BAL-32 / Jun 8, 2010 2:15:37PM
QUARANTINE / BB1-105 / CC0001167 / Jun 6, 2010 9:20:36AM
TRANSFER / BB1-105 / CC0001167 / Apr 29, 2010 9:09:25AM
TRANSFER / BB1-105 / IN0000285 / BAL-17 / Apr 29, 2010 8:50:22AM
TRANSFER / BB1-105 / CC0001167 / Dec 14, 2009 3:15:46PM
TRANSFER / BB1-105 / IN0000809 / BAL-32 / Dec 14, 2009 1:32:40PM
TRANSFER / BB1-105 / CC0001167 / Nov 11, 2009 3:47:25PM
TRANSFER / BB1-105 / IN0000285 / BAL-17 / D0000566 / Balance 17 / Nov 11, 2009 3:10:47PM
TRANSFER / BB1-105 / IN0000809 / BAL-32 / D0003251 / Balance 32 / Nov 11, 2009 3:08:10PM

Secondary Standard

Standard Information

Standard:	SP0010373	Solvent:	None
Category:	--	Quantity:	--
Description:	Perfluorooctanoic Acid (PFOA)	Date Prepared:	--
		Date Expires:	6/5/2013 12:00:00AM
		Storage Condition:	Ambient Temperature

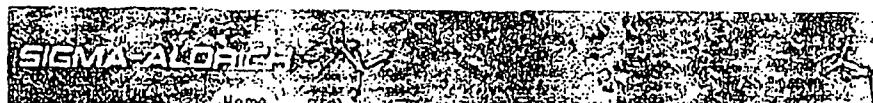
TRANSFER / BB1-105 / CC0001167 / Oct 12, 2009 10:11:36AM
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TRANSFER / BB1-105 / IN0000809 / BAL-32 / Sep 2, 2009 9:26:41AM
TRANSFER / BB1-105 / CC0001167 / May 22, 2009 10:10:51AM
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TRANSFER / BB1-105 / CC0001167 / Apr 29, 2009 9:22:51AM
TRANSFER / BB1-105 / IN0000809 / BAL-32 / Apr 29, 2009 9:00:51AM
TRANSFER / BB1-105 / CC0001167 / Jan 22, 2009 1:49:23PM
TRANSFER / BB1-105 / IN0000809 / BAL-32 / Jan 22, 2009 1:30:31PM
TRANSFER / BB1-105 / CC0001167 / Dec 4, 2008 10:47:28AM
TRANSFER / BB1-105 / IN0000285 / BAL-17 / Dec 4, 2008 9:45:50AM
TRANSFER / BB1-105 / CC0001167 / Nov 11, 2008 10:07:18AM
TRANSFER / BB1-105 / IN0000809 / BAL-32 / Nov 11, 2008 9:48:49AM
TRANSFER / BB1-105 / CC0001167 / Inventory: 42 / Aug 14, 2008 9:46:17AM
TRANSFER / BB1-105 / CC0001167 / Jul 21, 2008 8:52:13AM
TRANSFER / BB1-105 / IN0000285 / BAL-17 / Jul 21, 2008 8:06:46AM
TRANSFER / BB1-105 / CC0001167 / Jun 10, 2008 10:30:21AM
TRANSFER / BB1-105 / IN0000285 / BAL-17 / Jun 10, 2008 10:01:15AM
TRANSFER / BB1-105 / CC0001167 / Jun 6, 2008 9:25:39AM
RECEIVED / BB1-105 / CC0001159 / Jun 6, 2008 9:18:20AM
LOGIN / No Location / Jun 6, 2008 9:17:21AM

Component Concentrations

<u>Component</u>	<u>Concentration / Amount</u>	<u>Standard / Description</u>	<u>Aliquot</u>
PFOA (TRIAL)	99.9 %		
Perfluorooctanoic acid (C8 Acid-PFOA)	99.9 %		

Prepared From

Created On: 6/10/2008 12:49:27PM
Created By: Sheehan, Amy



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: Product Name or No.



SIGMA-ALDRICH

Certificate of Analysis

Product Name	Perfluorooctanoic acid, 96%
Product Number	171468
Product Brand	Aldrich
CAS Number	335-67-1
Molecular Formula	$\text{CF}_3(\text{CF}_2)_6\text{COOH}$
Molecular Weight	414.07

TEST	SPECIFICATION	LOT 07420DH RESULTS
APPEARANCE	WHITE TO OFF-WHITE POWDER, CRYSTALS,	WHITE POWDER
INFRARED SPECTRUM		CONFORMS TO STRUCTURE.
TITRATION	95.5% - 104.5% (WITH NAOH)	101.0% (WITH NAOH)
GAS LIQUID	95.5% (MINIMUM)	99.9%
CHROMATOGRAPHY		
TITRATION	2 % H ₂ O (MAXIMUM)	0.49% H ₂ O (WITH "KARL FISCHER" REAGENT)
QUALITY CONTROL		APRIL 2007
ACCEPTANCE DATE		

Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

Related Information

MSDS

Specification Sheet

Certificate of Analysis

: Enter Lot No.

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171468 (Aldrich)

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Sp10373 AmB 08/18/09

PAGE No. 01 TIME 10:46:58 DATE 06/03/2008 SHIP TO: MPI RESEARCH
 Shipped From Aldrich
 6000 North Teutonia Avenue
 Milwaukee, Wisconsin 53209
 414-438-3850 or 800-558-9160
 3048 RESEARCH DR
 STATE COLLEGE PA 16801

SOLD TO:
 MPI RESEARCH

3058 RESEARCH DR
 STATE COLLEGE PA 16801

PURCHASE ORDER No. SC11-02120



CATALOG No.	UNIT	QTY ORD.	QTY SHIP	B/O	DESCRIPTION	UNIT PRICE	NET AMOUNT
171468-5C 07420DH		000001	0000001	000000	PERFLUORODANTIC ACID		
REC 058921 DEC 5/28 ✓ Received AmB 08/04/08							
TOTAL							
DELIVERY No. 0829127919	SOLD TO ACCT. 0049668884	ORDER No. 3000043645	REQUESTED ROUTING TERMS-NET 30 DAYS F.O.B. PLANT AIRBORNE GROUND			SHIPPING CHARGE	
CUSTOMER INFORMATION		The Sigma-Aldrich Group  SIGMA  ALDRICH  SUPELCO  Fluka  SAFC					
<small>All sales are expressly limited to and conditioned upon the terms and conditions appearing on the front and back of this form. Sigma-Aldrich brand products are sold exclusively through Sigma-Aldrich, Inc.</small>							

TAC EPA 00306

000297



Track results detail

[► Print this page](#)

Tracking results detail for 54811240783

Tracking summary

Current Status ✓ Shipment delivered.
 Delivered on 6/5/2008 10:57 am
 Delivered to Receptionist
 Signed for by D COHENOUR

Tracking history

Date and Time	Status	Location
6/5/2008 10:57 am	Shipment delivered.	Spring Mills, PA
9:26 am	With delivery courier.	Spring Mills, PA
9:15 am	Arrived at DHL facility.	Spring Mills, PA
7:05 am	Transit through DHL facility	Harrisburg, PA
7:02 am	Depart Facility	Harrisburg, PA
6:42 am	Depart Facility	Wilmington, OH
12:46 am	Processed at DHL Location.	Wilmington, OH
6/3/2008 10:57 am	Shipment picked up	Milwaukee, WI

Ship From:	Ship To:	Shipment Information:
ALDRICH CHEMICAL Milwaukee, WI 53209 United States	MPI RESEARCH State College, PA 16801 United States	Ship date: 6/3/2008 Pieces: 1 Total weight: 1 lb Ship Type: Package Shipment Reference: 0829127919 Service: Ground Special Service: Description:

Tracking detail provided by DHL: 6/12/2008, 3:53:55 am pt.

You are authorized to use DHL tracking systems solely to track shipments tendered by or for you to DHL. Any other use of DHL tracking systems and information is strictly prohibited.

* Note on weight:

The weights displayed on this website are the weights provided when the shipment was created. Actual chargeable weights may be different and will be provided on invoice.

SP10373
Page 1 of 1
AMB 08/18/09

Delivery Signature Detail

[► Print this page](#)

Signature details for 54811240783

RECEIVED IN GOOD ORDER EXCEPT AS NOTED

Summary details

Current Status	<input checked="" type="checkbox"/> Shipment Delivered
Delivered on	6/5/08 10:57 am
Delivered to	Receptionist
Signed for by	D COHENOUR

Receiver Information

MPI RESEARCH
State College, PA 16801
United States

Tracking detail provided by DHL: 6/12/2008 3:54:09 AM

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